

# 11. Privacy Notice and Choice

Blase Ur and Mainack Mondal  
April 30<sup>th</sup>, 2018  
CMSC 23210 / 33210



Security, Usability, & Privacy  
Education & Research

# Today's class

- Discuss projects
- Privacy notice and choice

# Project suggested paper structure

- Abstract
- Introduction
- Related work
- Methodology
- Pilot results
- Lessons learned (for moving forward)
- Discussion / limitations / conclusion

# Privacy notice & choice

# Fair Information Practice Principles

(US Federal Trade Commission)

1. Notice / awareness
2. Choice / consent
3. Access / participation
4. Integrity / security
5. Enforcement / redress



## About Our Privacy Policy

Whenever you do something like buy one of our products, watch a video or use our services, information is created. Because we know your privacy is important to you, we work hard to explain how we collect, use and protect that information. There's a lot of information, and the actual policy is written in an **easy to understand "FAQ" format** ([/sites/privacy\\_policy/terms](#)). We want to simplify things so you can make informed choices about your privacy, and then spend the rest of your day doing the things you love.

Effective July 24, 2015

## A Quick Summary of Our Policy

Our Privacy Policy applies to your use of all products, services and our AT&T affiliates, such as DIRECTV, unless they have a Because some apps, including some AT&T and DTV branded information, or use information in different ways, they may have and/or terms and conditions. These apps may also offer you a your personal information.

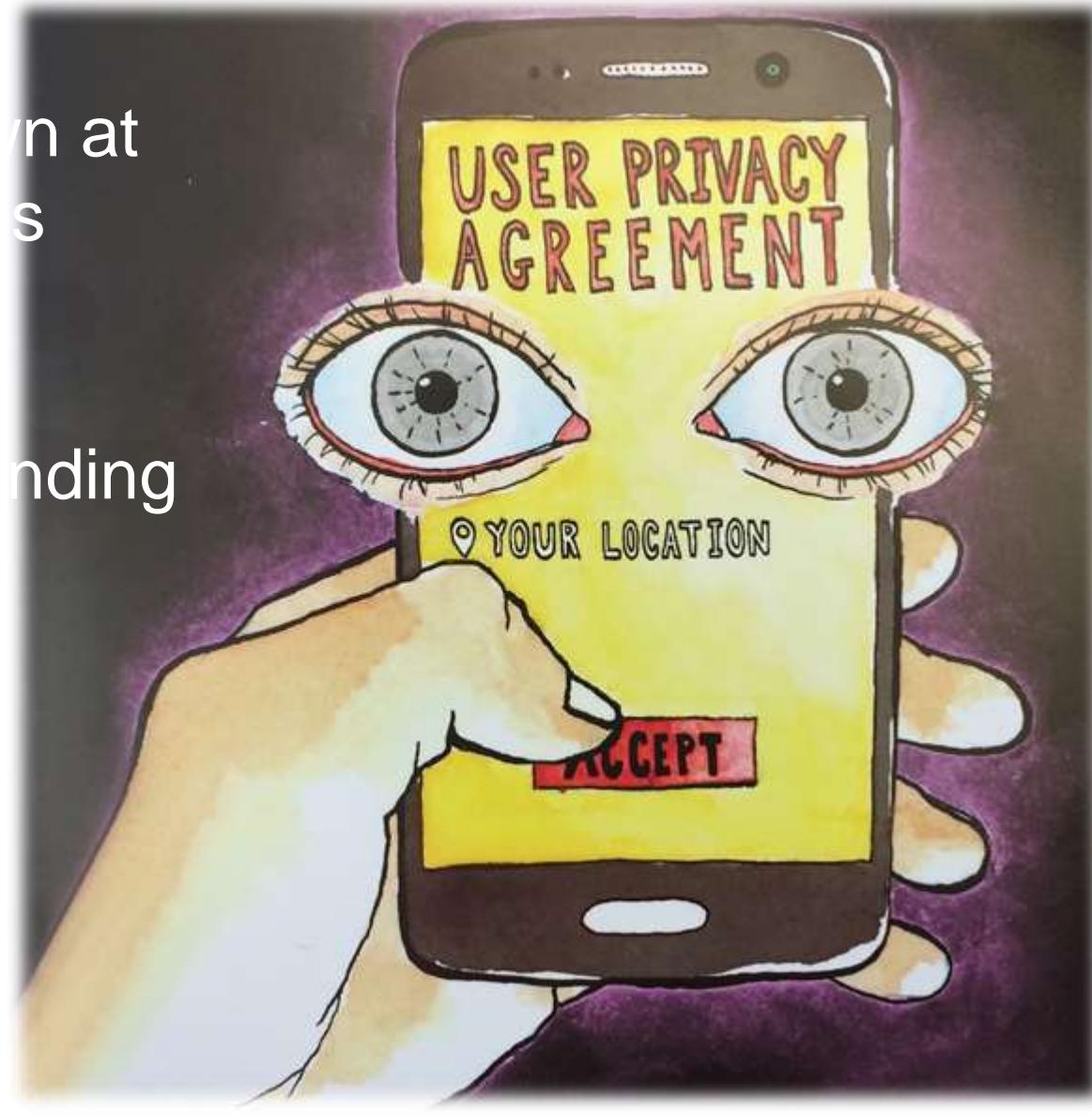
[Back to Top](#)

## Our privacy commitments

- We don't sell your Personal Information to anyone for any purpose. Period.
- We keep your Personal Information in our business records while you are a customer, or until it is no longer needed for business, tax or legal purposes.
- We will keep your information safe using encryption or other appropriate security controls.

vn at  
s

nding



**The Washington Post**

# Privacy Policy

Published: January 1, 2015

The WP Company LLC ("The Washington Post") recognizes the importance of protecting your personal information, and we have prepared this Privacy Policy to tell you about our

[Search Facebook](#)

[Data Policy](#)

We give you the power to share as part of our mission to make the world more open and connected. This policy describes the information we collect and how it is used and shared. You can find additional tools and information at [Privacy Basics](#).

As you review our policy, keep in mind that it applies to all third-party services that do not have a separate policy or that link to this policy, which we call the "Facebook Services" or "Services".

[What kinds of information do we collect?](#)

[How do we use this information?](#)

[How is this information shared?](#)

[How can I manage or delete information about me?](#)

[How do we respond to legal requests or prevent harm?](#)

[How our global services operate](#)

[How will we notify you of changes to this policy?](#)

# PRIVACY POLICY

en français (simplified)

We have updated our Privacy Policy as of 10 June 2015.

## SoundCloud Privacy Policy

Welcome to SoundCloud®, a service provided by SoundCloud Limited ("SoundCloud", "we", "our", "us").

Your privacy is important to us. This Privacy Policy explains how we collect, store, use and disclose your information when you use [soundcloud.com](#) and [m.soundcloud.com](#) (together, the "Website"), our mobile and desktop apps (the "Apps") and all related sites, players, widgets, tools, apps, data, software, APIs and other services provided by SoundCloud (the "Services").

This Privacy Policy explains the following, amongst other things:

- Our principles with respect to your information and your privacy
- The information we collect about you
- How we use your information
- How we share your information
- How we use cookies and similar technology
- Your choices with respect to your information
- How to contact us regarding privacy issues

By using the Website, the Apps or any of the Services, and in particular by registering a SoundCloud® account, you are consenting to the use of your information in the manner set out in this Privacy Policy.

For your convenience, information relating to our use of cookies and similar technology is set out in a separate [Cookies Policy](#). The Cookies Policy forms part of the Privacy Policy and whenever we refer to the Privacy Policy, we are referring to the Privacy Policy incorporating the Cookies Policy.

res, and uses your personal information as a data controller in connection with the services and websites (together "Services") according to this privacy policy. If you have any questions or comments about this privacy policy, please contact us at [privacy@rovio.com](mailto:privacy@rovio.com) or alternatively at Rovio. In the European Union, please see "Special Note About Children's Privacy" below. If you are accessing a Service You give consent to the processing, use and disclosure of your personal information in accordance with this privacy policy. If you do not agree to this Privacy Policy, you may not use the Services. Your acceptance of Services will signify your acceptance of the changes to this Privacy Policy.

but are not limited to: (i) by using Rovio's mobile apps or visiting our websites or services using a third party ID, such as social networking sites or gaming platforms; (ii) in Rovio's online stores or within the app (or "in-app purchase"); (v) via Rovio's support; and (vii) otherwise through use of Rovio Services where applicable.

**Microsoft**

## Privacy & Cookies

View Privacy Statement for:

[Shop & Sell](#) [CRM](#) [Microsoft.com](#) [Mobile Devices](#) [Office](#) [Enterprise Services](#) [Windows Server](#) [Rack](#) [Other Products](#)

Last Updated: October 2014

### Microsoft.com Privacy Statement

This privacy statement applies to Microsoft.com and Microsoft websites, services and products that collect data and share these terms, as well as their affiliated product support websites. It does not apply to Microsoft sites, services and products that do not display or link to this statement or that have their own privacy statement.

Please read the automatic cookie and data use ("Learn More" for cookie choices on a particular topic). You may also select from the products listed above to view their specific privacy statement. Some products, services or features mentioned in this statement may not be available in all markets. You can find more information on Microsoft's commitment to protecting your privacy at [http://www.microsoft.com/privacy](#).

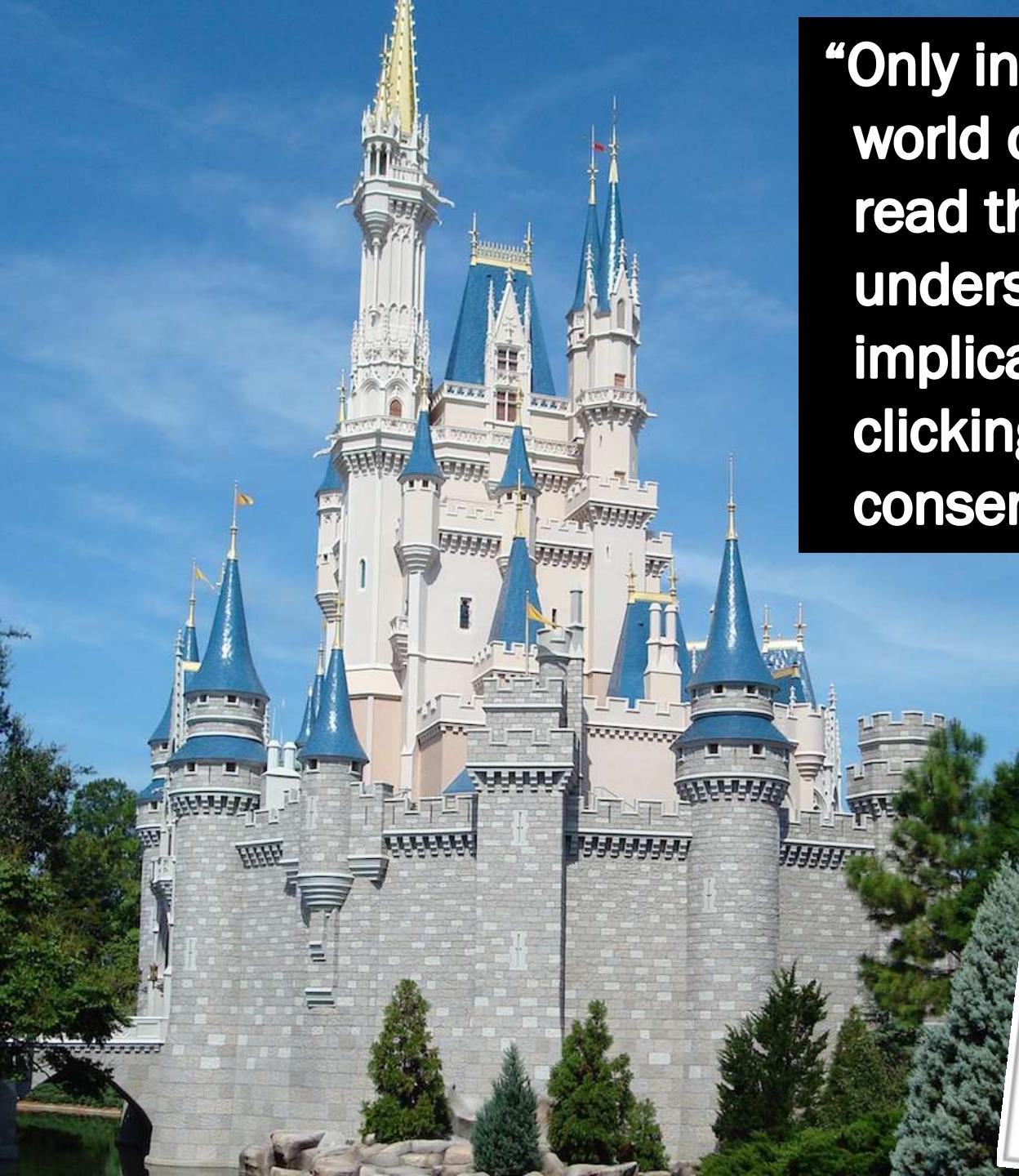
**Cookies & Similar Technologies**

Most Microsoft websites use "cookies," which are small text files stored on your device, to help operate the sites and collect information about online activity. For instance, we use cookies to store your preferences and settings. Rovio will also use cookies to provide targeted ads, medical history, and analyze site operations.

Rovio also uses web beacons to help deliver cookies and complete analytics. These may include web beacons from third-party service providers.

You have a variety of tools to control cookies and similar local storage, including:

- Browser controls to block or delete cookies



“Only in some fantasy world do users actually read these notices and understand their implications before clicking to indicate their consent”

REPORT TO THE PRESIDENT  
BIG DATA AND PRIVACY:  
A TECHNOLOGICAL  
PERSPECTIVE

Executive Office of the President  
President's Council of Advisors on  
Science and Technology

May 2014



# Tools of FTC in US

- Unfair practices
  - Injure consumer
  - Violate established policy
  - Unethical
- Deceptive practices
  - Mislead consumer
  - Differ from reasonable consumer expectations



ftc.gov

# FEDERAL TRADE COMMISSION PROTECTING AMERICA'S CONSUMERS

≡ MAIN MENU | SEARCH

## Digital Advertising Company Settles FTC Charges It Deceptively Tracked Consumers Both Online and Through Their Mobile Devices

**Settlement ensures consumers can control targeted ads**

FOR RELEASE

December 20, 2016

# Privacy Policy

## Privacy Policy Highlights

## Privacy Principles

## Privacy Policy FAQ

## Cookies

## Protection of Information

## Surveys

## Choice/Opt Out



### Choice/Opt Out

#### Opting out of email communications (promotional, free email newsletters, and Ratings alerts)

If you subscribe to any of our paid products or services (for example, *Consumer Reports* magazine or ConsumerReports.org), our free email newsletters (for example, those about cars, finance, drugs or safety issues) or our Ratings alerts, we may send you promotional emails about our other products and services or to ask you about your experience.

##### Opting out online

You can opt out of receiving these email communications from us by following the instructions provided at the bottom of each email. If you use this method, you will stop receiving only that particular type of email message.

If you are a subscriber to one of our paid products or services, you can manage your email communication preferences on your "My Account" page by clicking [here](#) (or by going to [www.consumerreports.org/myaccount](http://www.consumerreports.org/myaccount)).

EDITION: ▾

VIDEOS SMART CITY CES WINDOWS 10 CLOUD INNOVATION SECURITY MORE ▾ NEWSLETTERS ALL WRITERS

**ZDNet** 

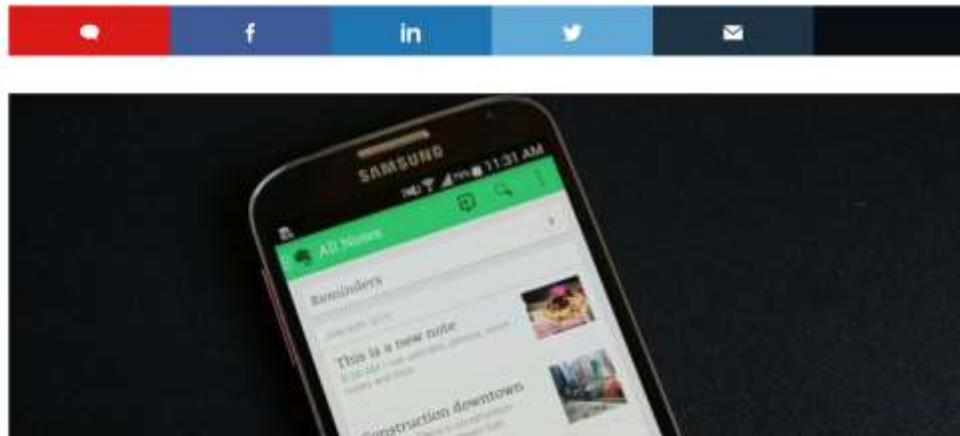
zdnet.com

# Evernote's new not-so-privacy policy will let employees read your notes

The note-taking app will let humans (and not just machines) sift through your private data.



By [Zack Whittaker](#) for [Zero Day](#) | December 14, 2016 -- 16:55 GMT (08:55 PST) | Topic: [Security](#)



## RELATED STORIES



Security  
[XSS on WebEx domains undoes previous fixes to Cisco WebEx Chrome extension](#)



Security  
[Expect renewed push for encryption backdoors from Trump administration](#)



Security  
[Breach site LeakedSource apparently raided by feds](#)



Security  
[Facebook adds security key and YubiKey support for 2FA](#)

# It's getting worse



# Simplified notice and choice

“the question is not whether consumers should be given a say over unexpected uses of their data; rather, **the question is how to provide simplified notice and choice.**”



**Edith Ramirez**  
Former FTC Chairwoman  
January 2015  
*Speaking about IoT privacy*

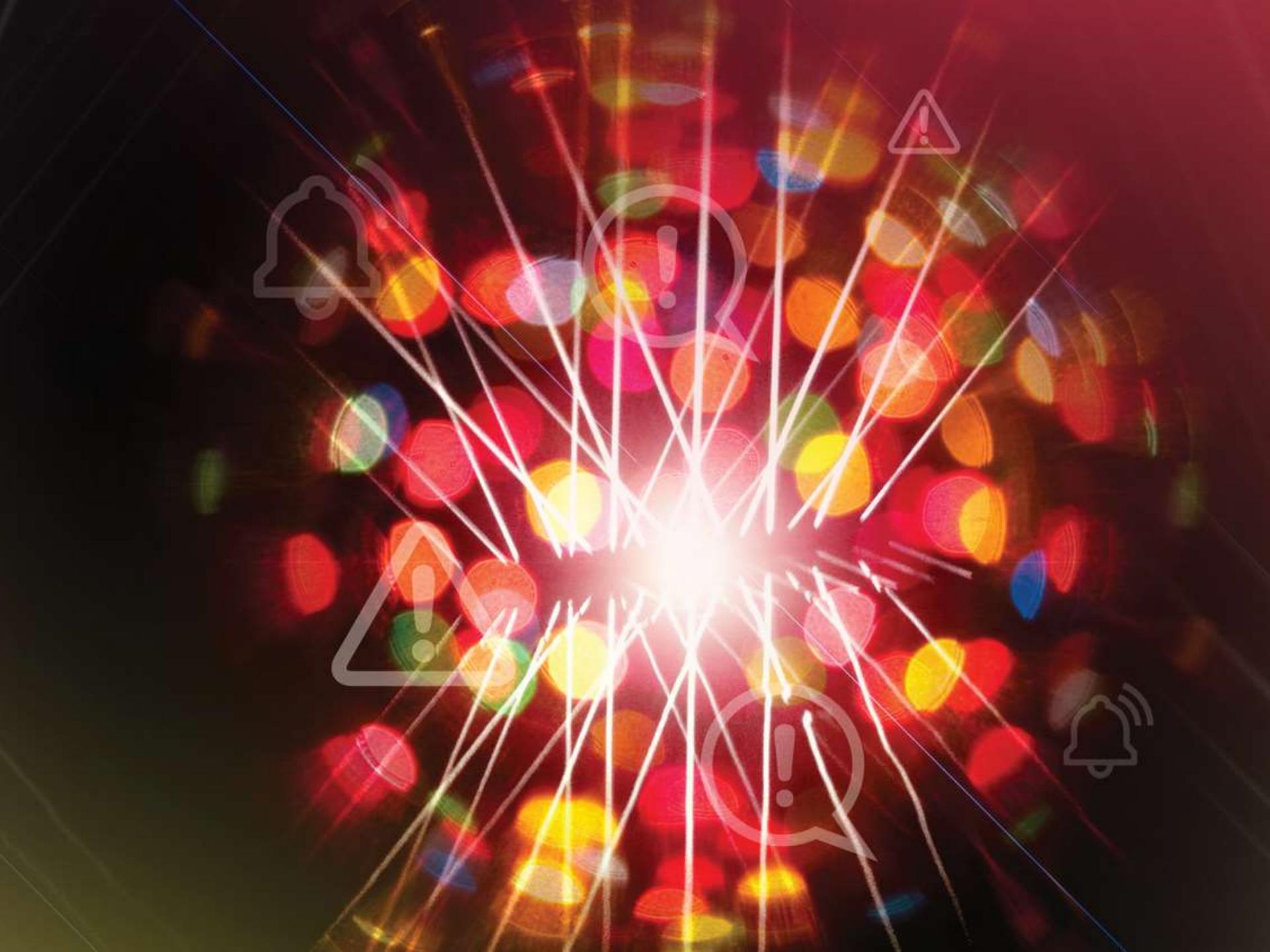
# EU General Data Protection Regulation (effective 5/25/18)



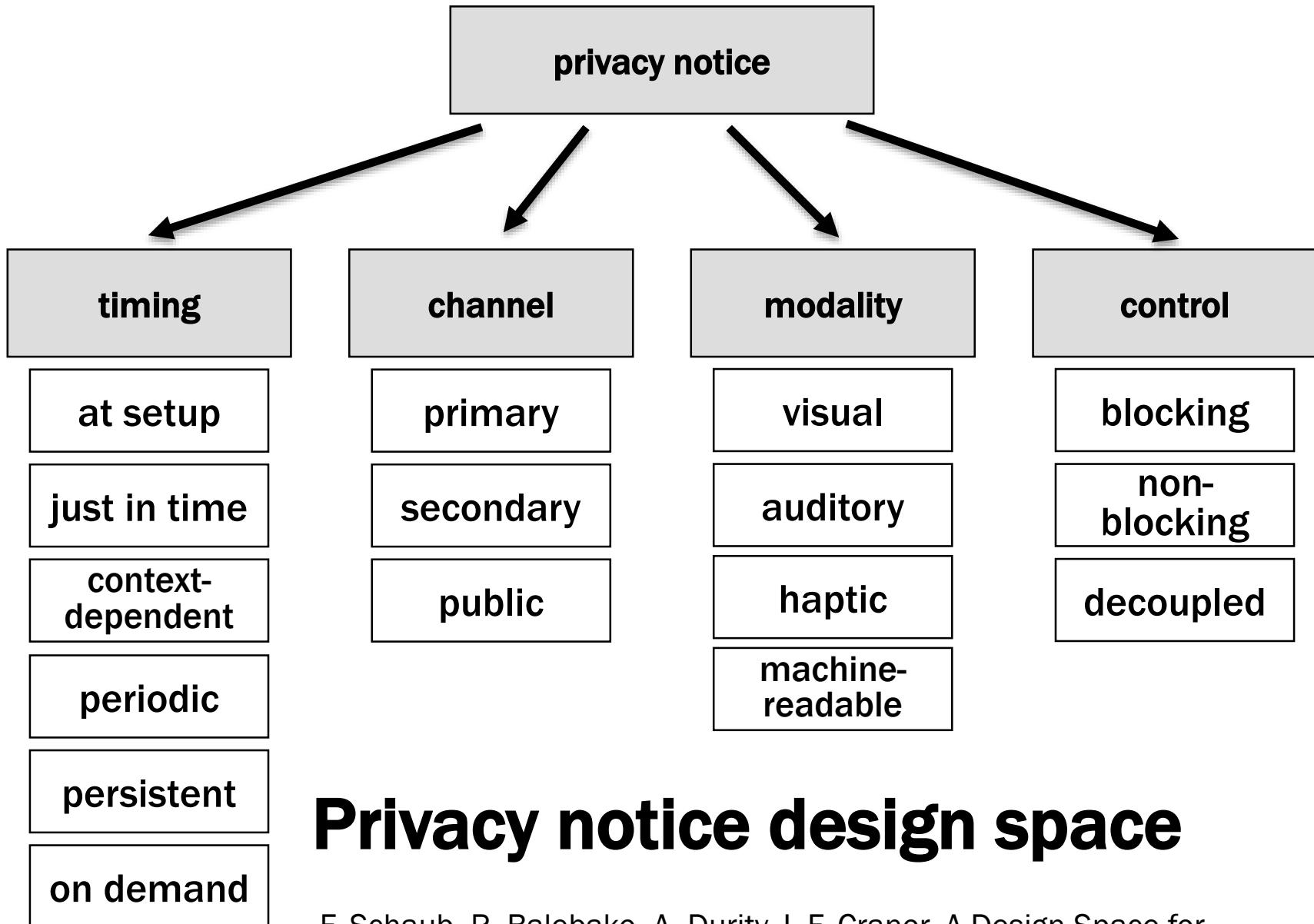
- “have **transparent** and easily **accessible** policies”
- “provide any information... in an **intelligible** form, using **clear** and **plain language**, **adapted** to the data subject”
- Request consent in a way that is “**clear**, **concise**, and **not unnecessarily disruptive**”

# How can we put people in control over their personal information?



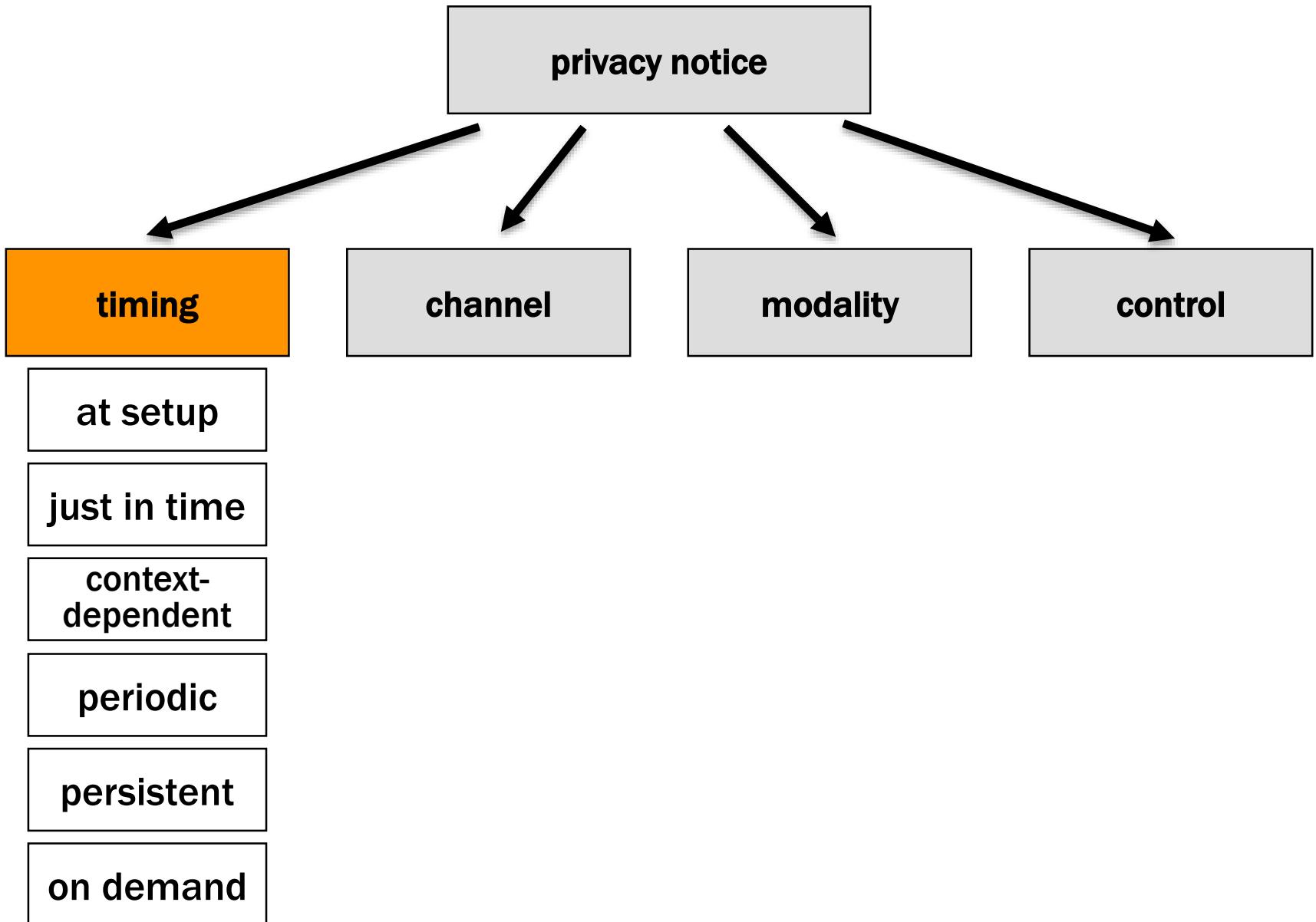


# Privacy Notice Design Space



## Privacy notice design space

F. Schaub, R. Balebako, A. Durity, L.F. Cranor, A Design Space for Effective Privacy Notices, SOUPS'15



# privacy notice



timing

channel

modality

control

at setup

just in time

context-dependent

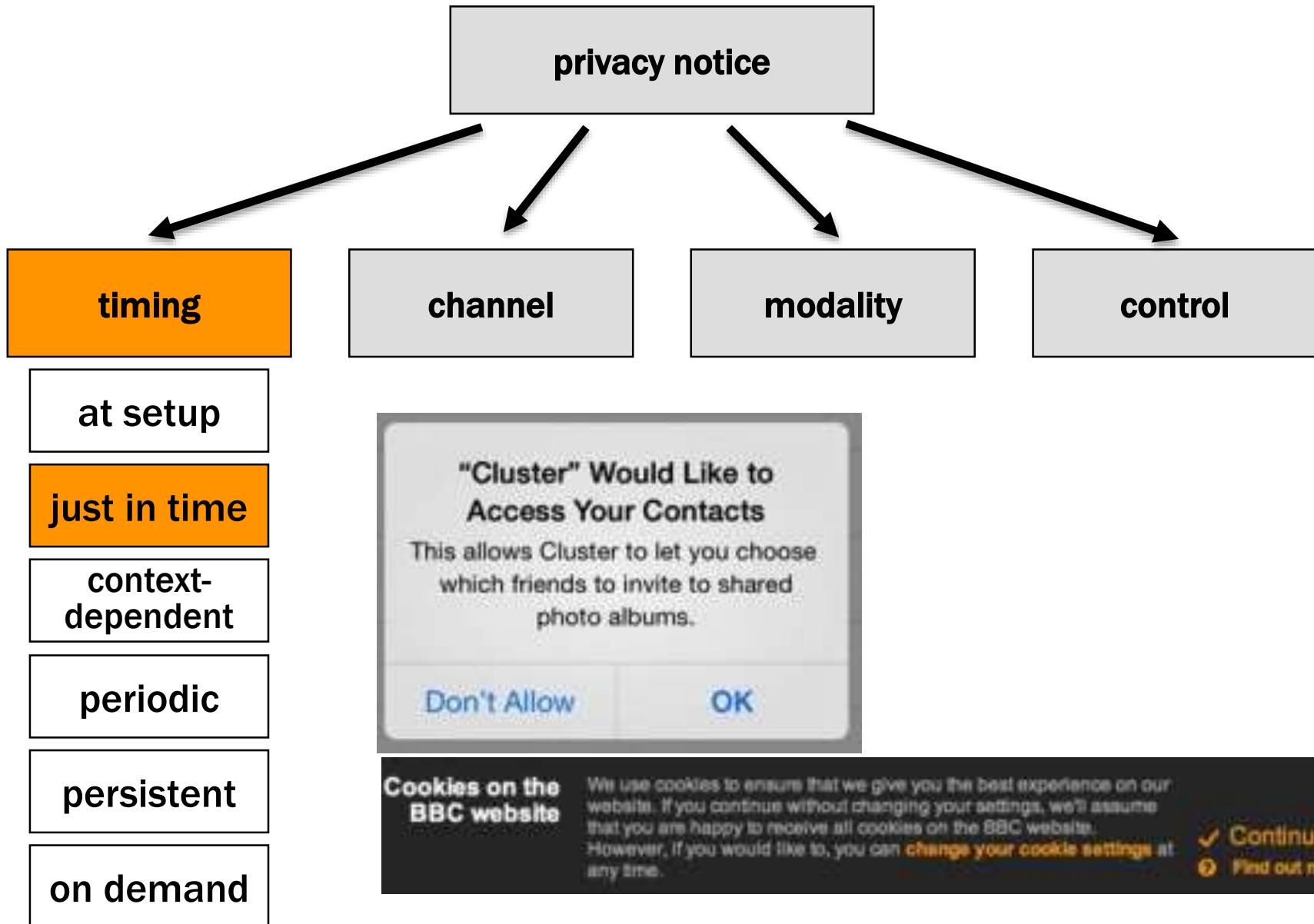
periodic

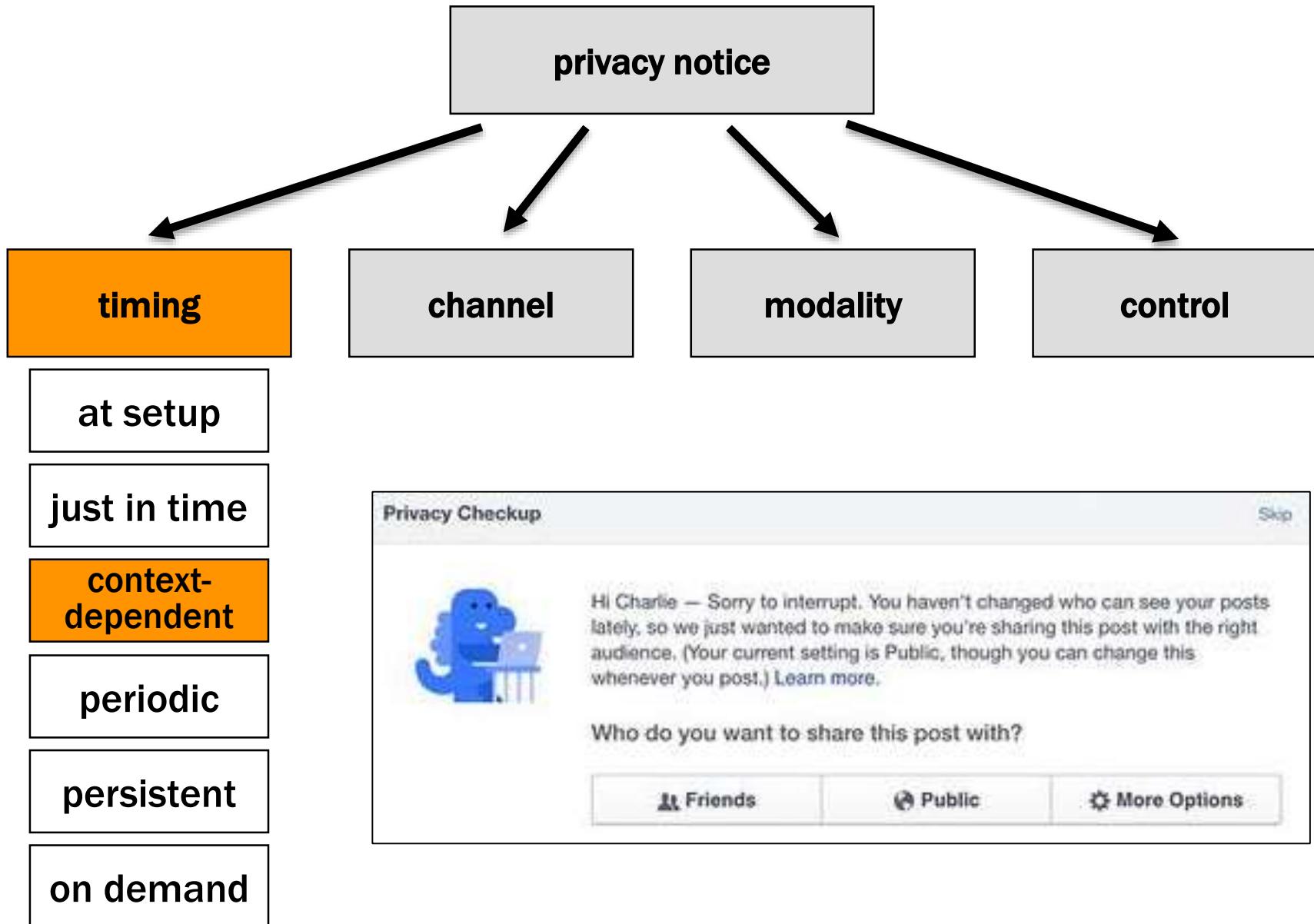
persistent

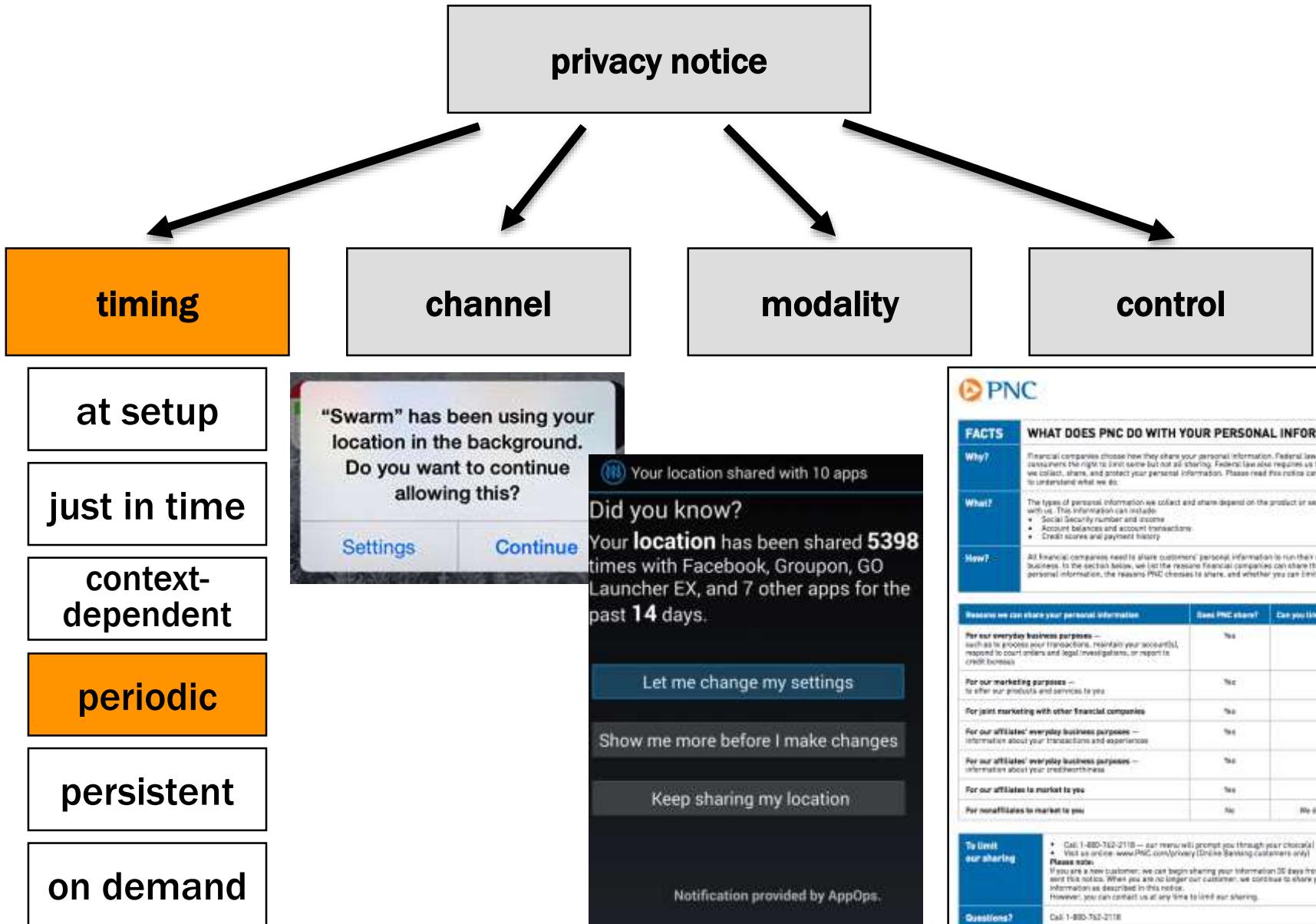
on demand

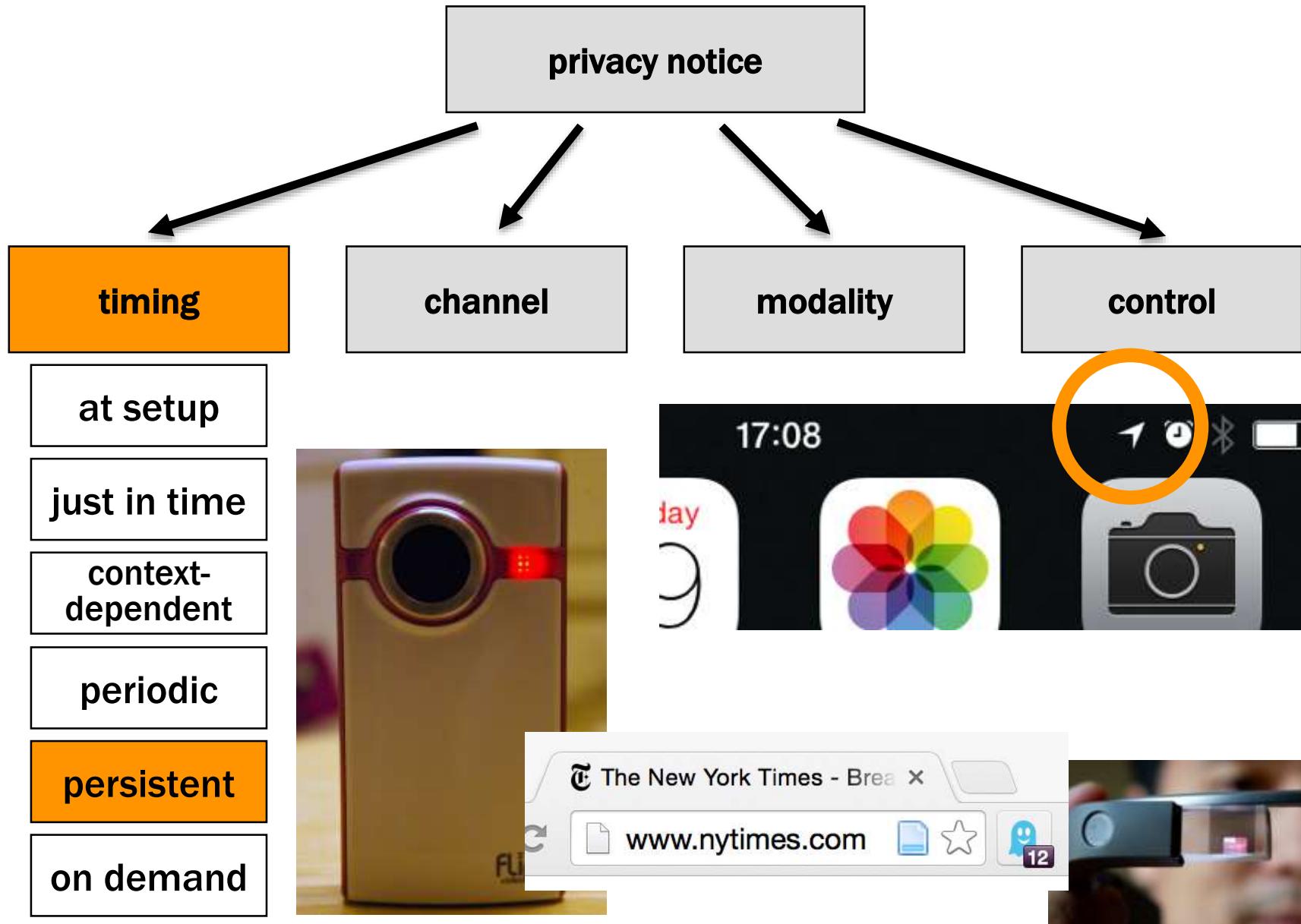
The collage includes the following elements:

- Facebook Messenger Privacy Notice:** A screenshot showing a request for access to identity, contacts/calendar, location, SMS, phone, photos/media/files, camera/microphone, Wi-Fi connection information, and device ID/call information.
- Fiberlink End User License Agreement (EULA):** A screenshot of a mobile device displaying the EULA for Fiberlink, which requires acceptance before proceeding with enrollment.
- iTunes Store Terms & Conditions:** A screenshot of a computer screen showing the iTunes Terms & Conditions, which require acceptance before using the service.
- Google Play Privacy Policy:** A screenshot of a mobile device displaying the Acme Privacy Policy, which details how user information is collected, used, and shared.
- Location-based Services:** A screenshot of a mobile device showing a map with a location pin and text indicating the app can determine the user's current location.
- Medical Information Summary:** A screenshot of a document titled "Your Information. Your Rights. Our Responsibilities." which discusses medical information and rights.
- Information Sharing Matrix:** A screenshot of a table showing data collection and sharing practices across various categories like location, contact, and health.
- Privacy Notice Footer:** A screenshot of a footer section containing legal disclaimers and links to other pages.









## privacy notice



timing

at setup

just in time

context-dependent

periodic

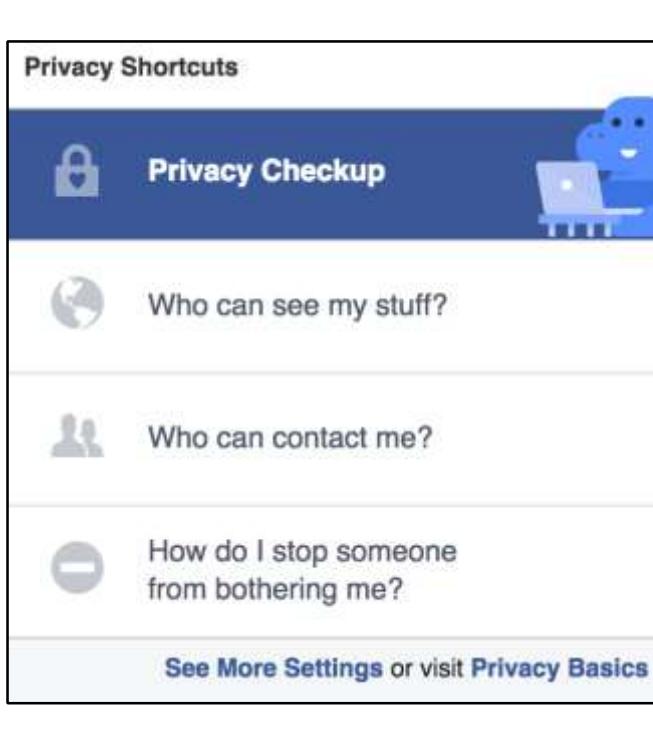
persistent

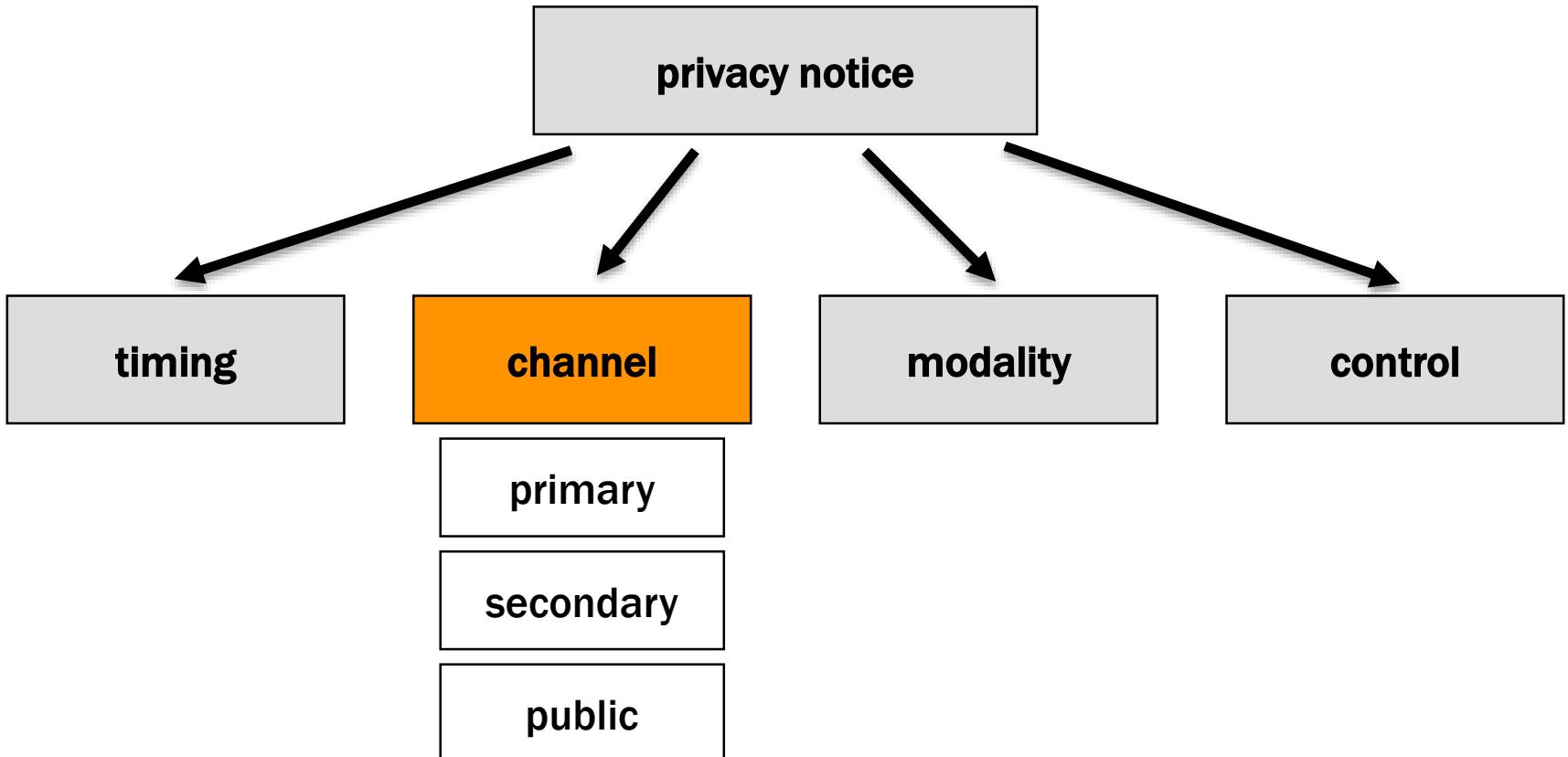
on demand

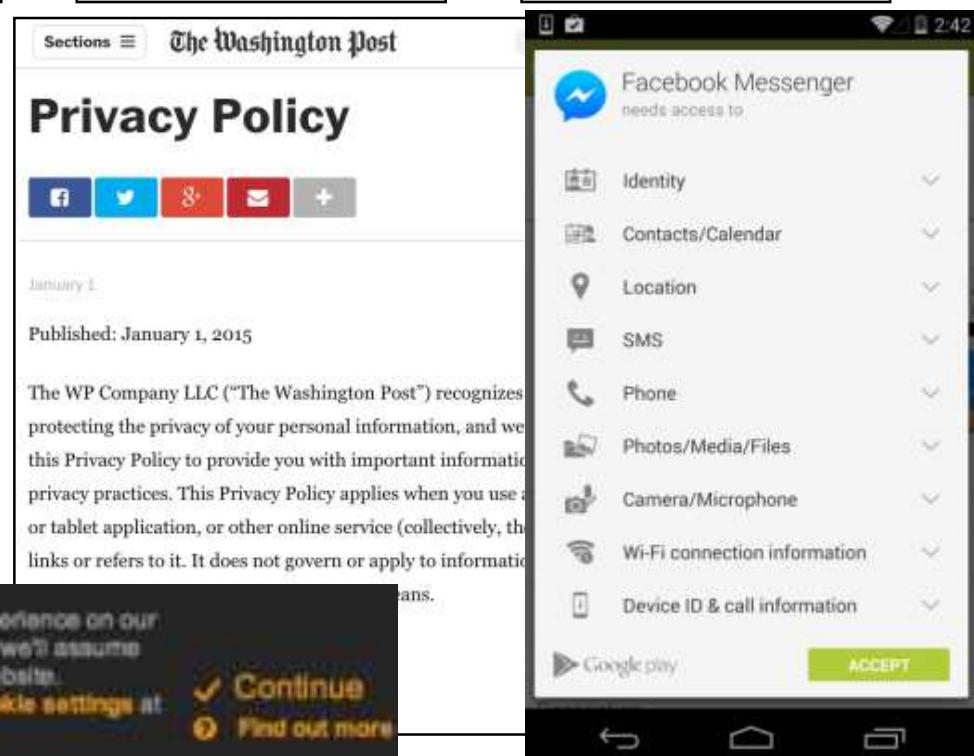
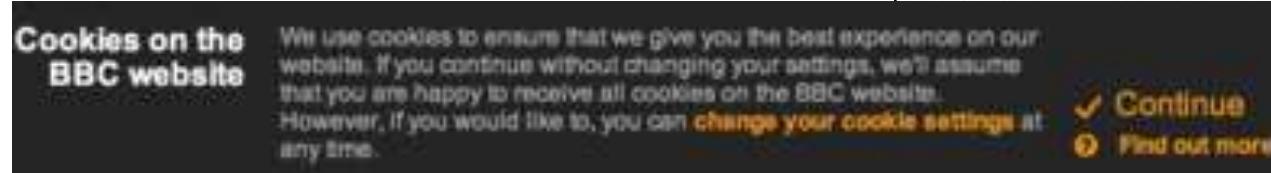
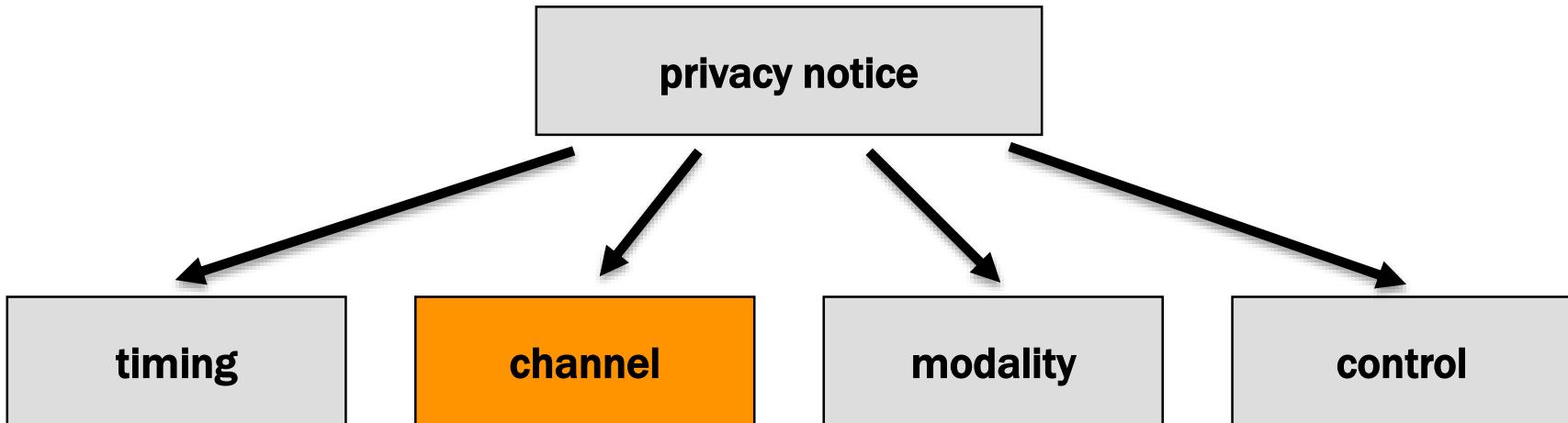
channel

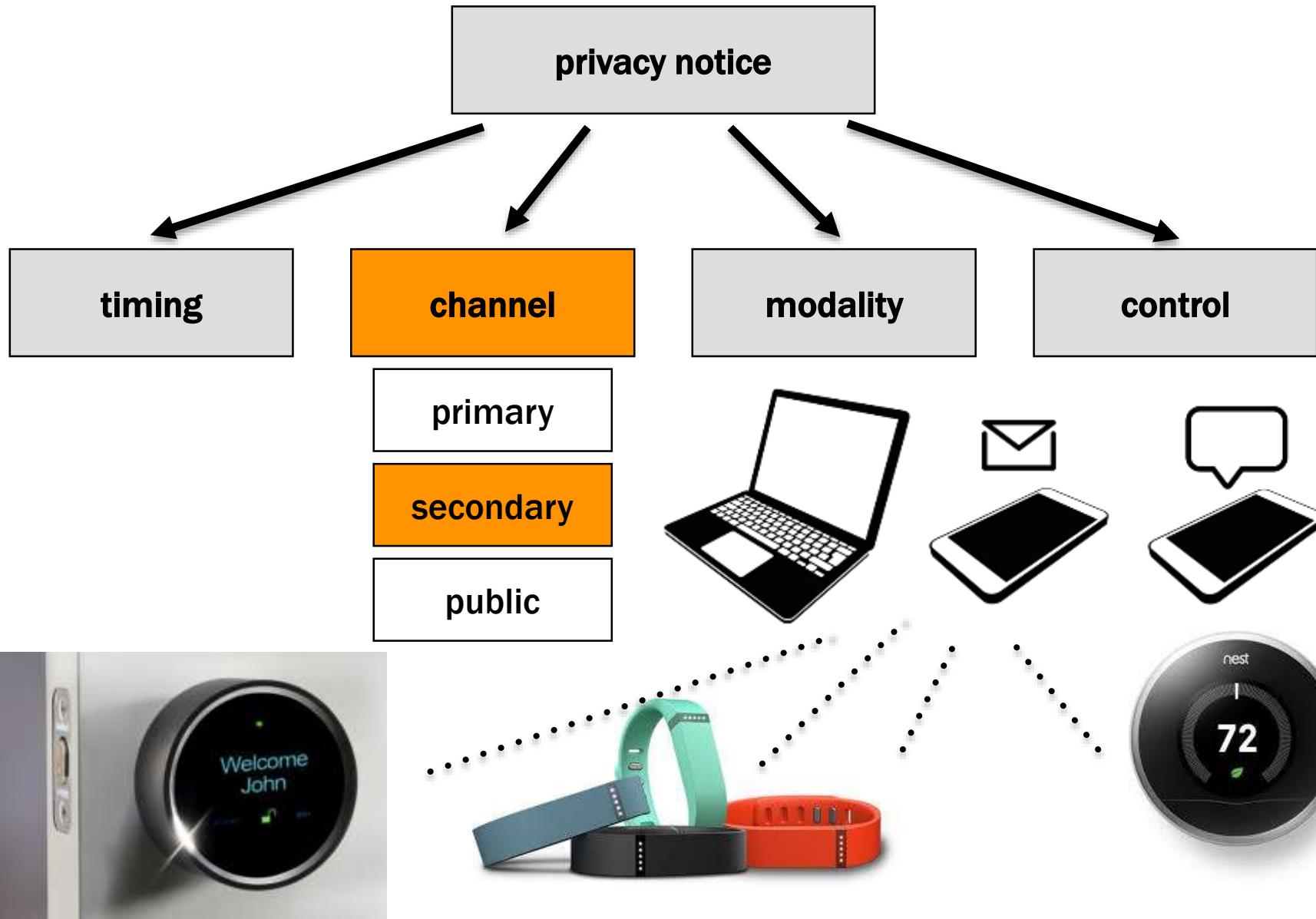
modality

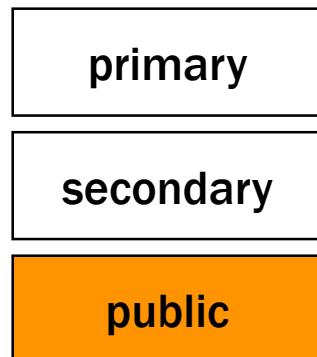
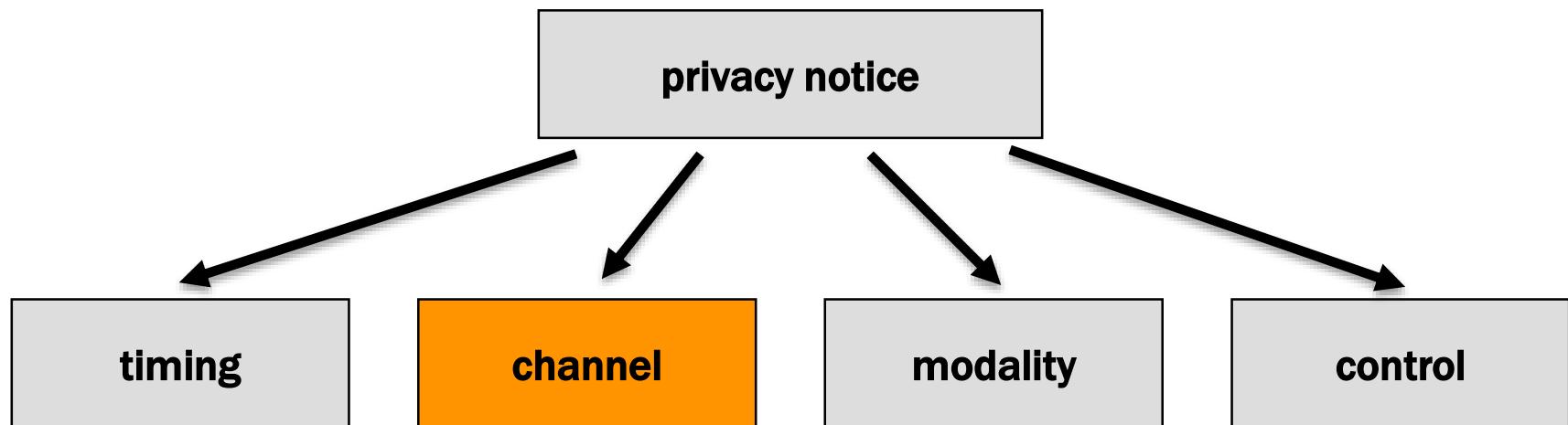
control

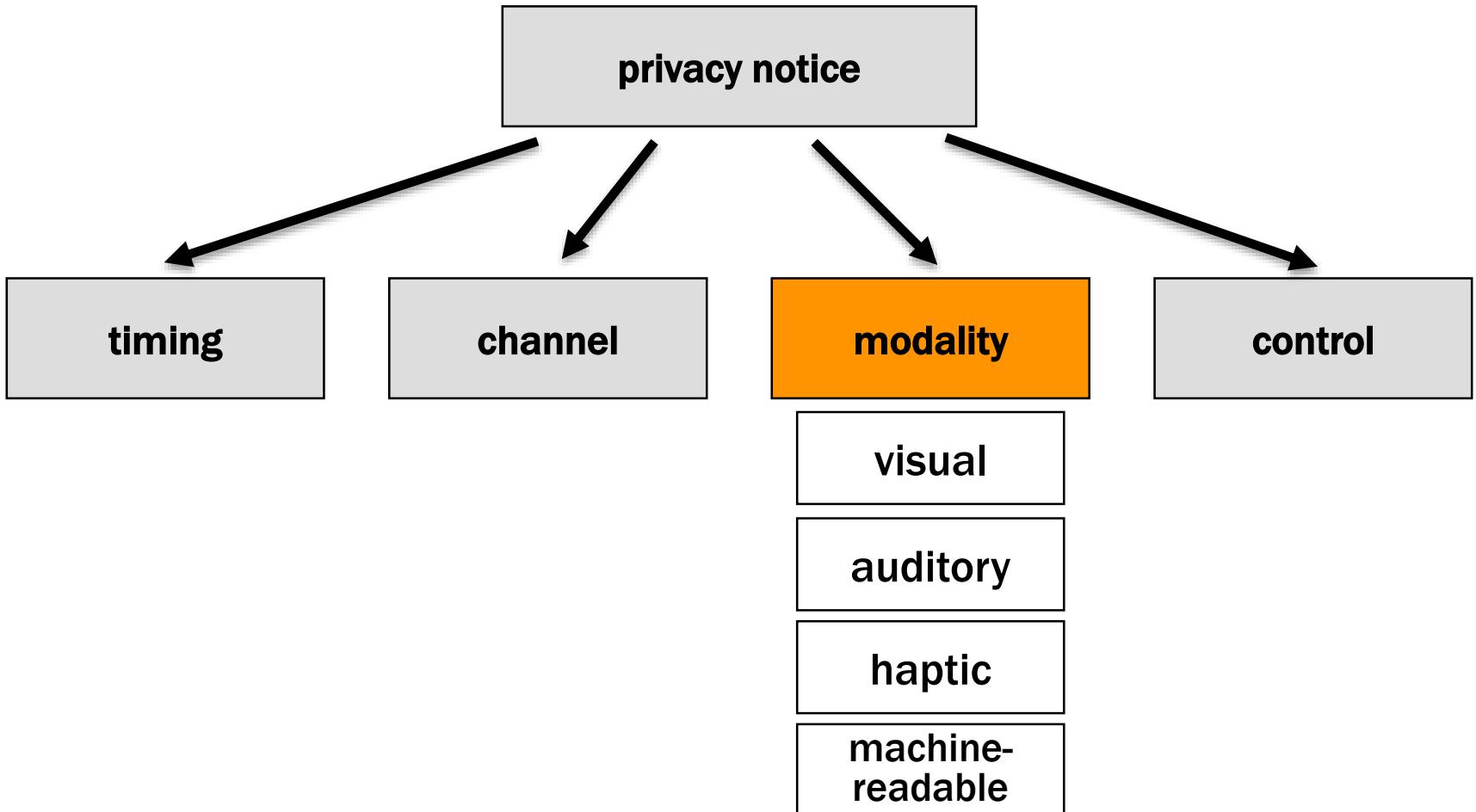


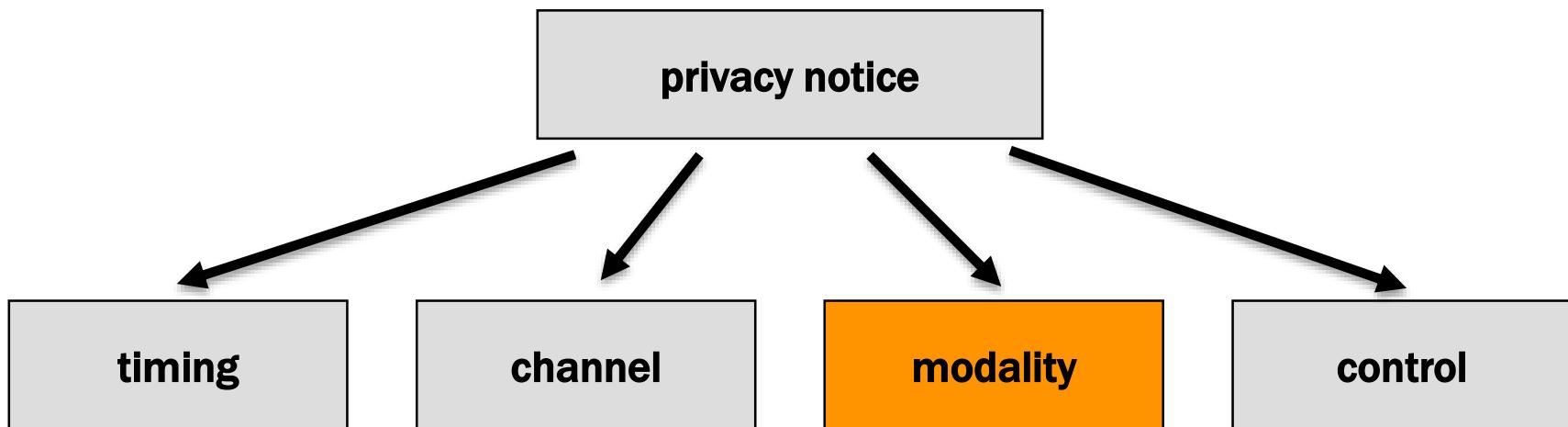












We have updated our Privacy Policy as of 10 June 2015.

## SoundCloud Privacy Policy

Welcome to SoundCloud®, a service provided by SoundCloud Limited ("SoundCloud", "we", "our", "us").

Your privacy is important to us. This Privacy Policy explains how we collect, store, use and disclose your information when you use [soundcloud.com](http://soundcloud.com) and [m.soundcloud.com](http://m.soundcloud.com) (together, the "Website"), our mobile and desktop apps (the "Apps") and all related sites, players, widgets, tools, apps, data, software, APIs and other services provided by SoundCloud (the "Services").

This Privacy Policy explains the following:

- Our principles with respect to your information
- The information we collect about you
- How we use your information
- How we share your information
- How we use cookies and similar technologies
- Your choices with respect to your information
- How to contact us regarding privacy

By using the Website, the Apps or any SoundCloud® account, you are consenting to this Privacy Policy.

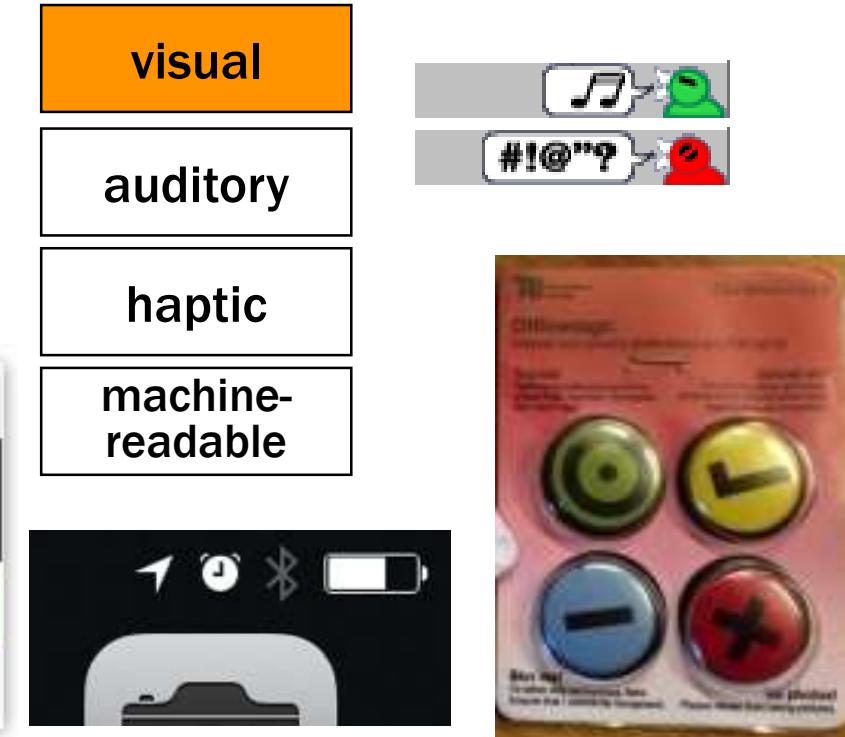
For your convenience, information related to our Cookies Policy, Terms of Service and other legal documents is available in a separate section of the Website.

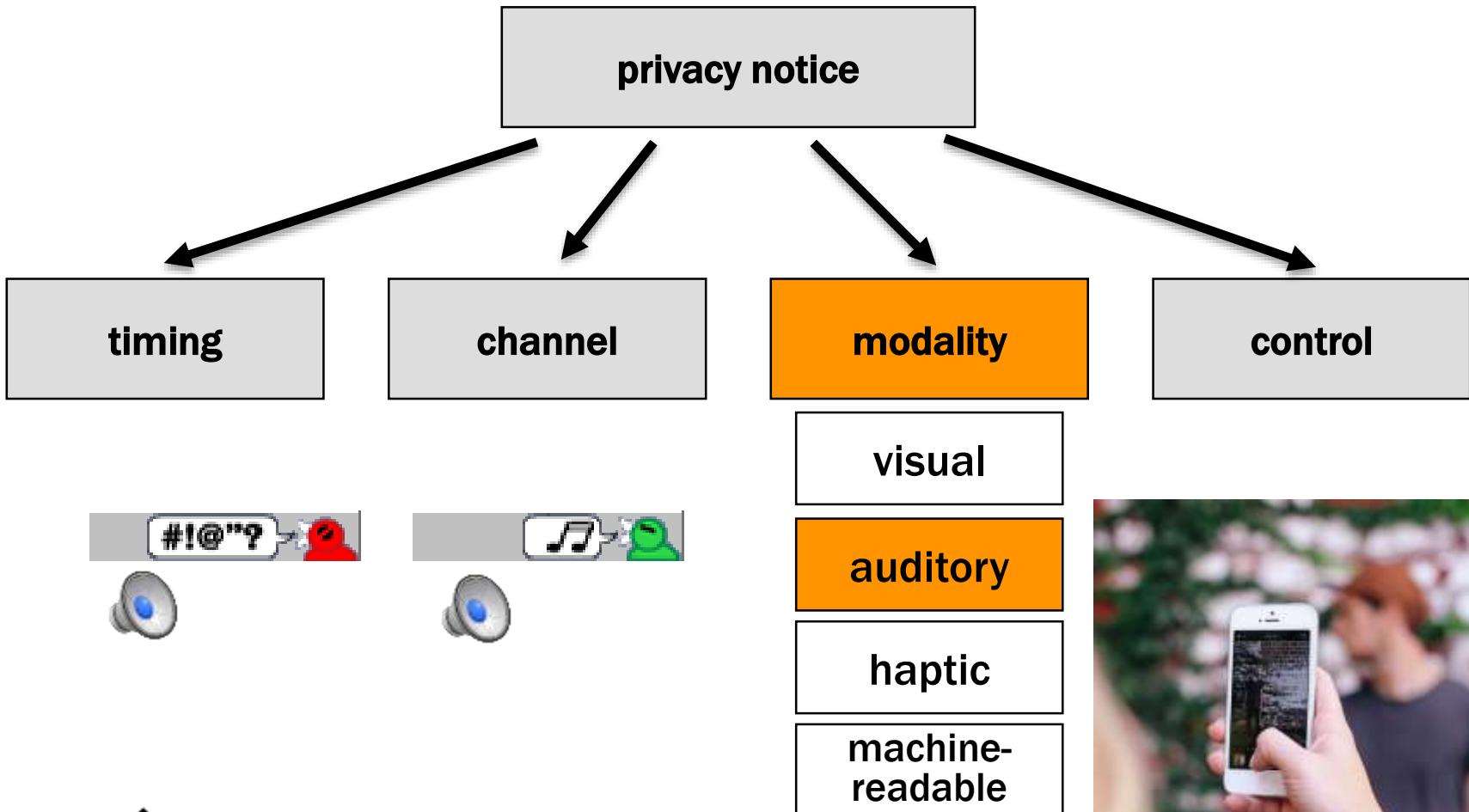
[Disconnect Privacy Icons](#)

examplesite.com

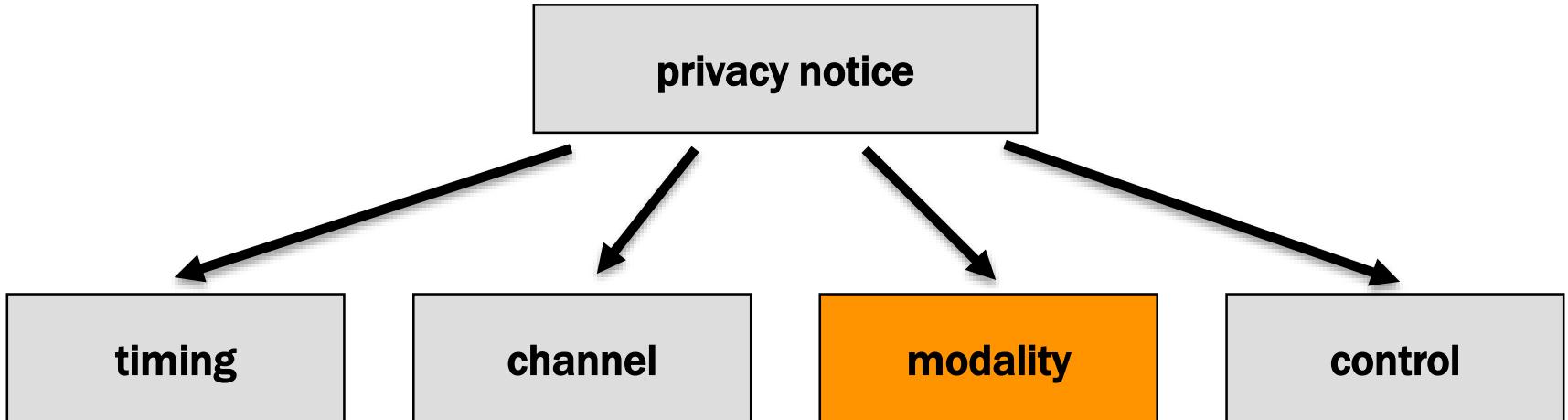
Privacy Icons Search

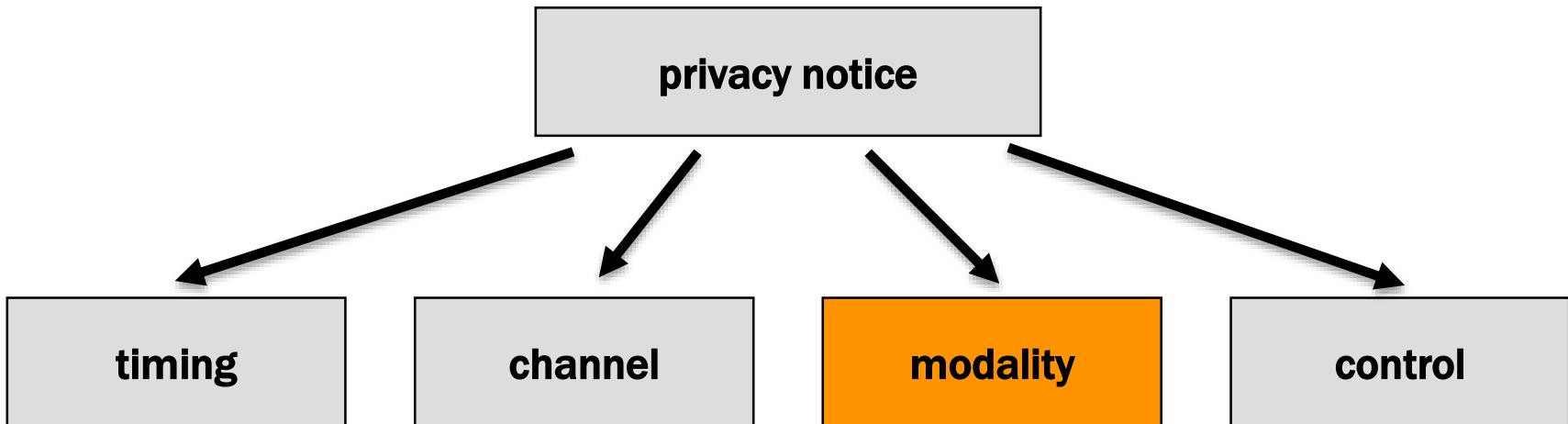
Display Options





*“this call will be recorded for  
training purposes”*



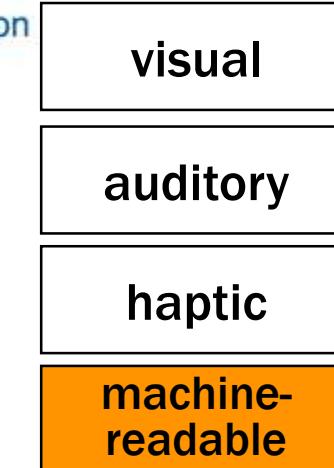


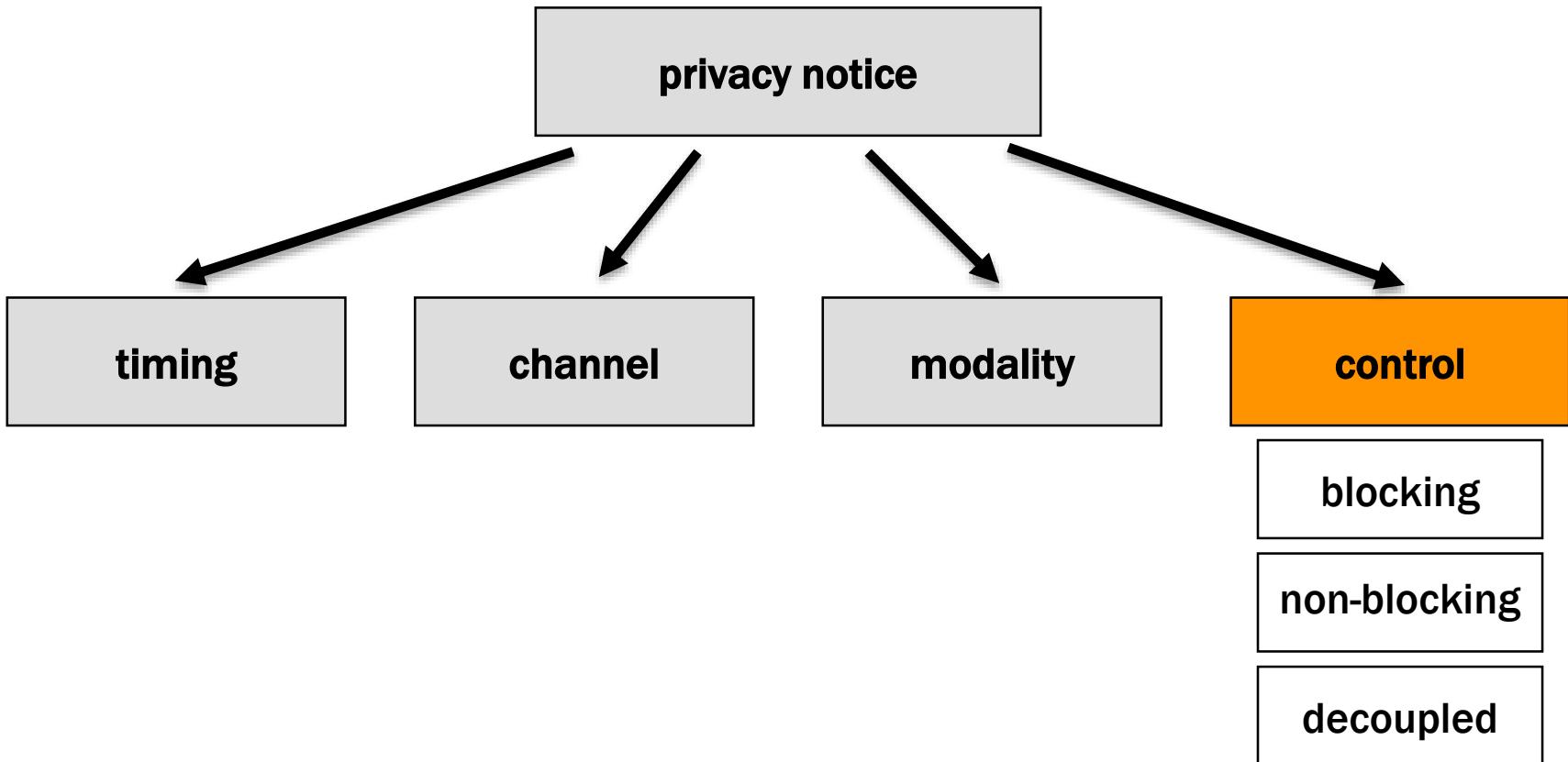
## The Platform for Privacy Preferences 1.1 (P3P1.1) Specification

W3C Working Group Note 13 November 2006

```

<POLICY xmlns="http://www.w3.org/2000/P3Pv1"
  entity="TheCoolCatalog, 123 Main Street, Seattle, WA 98103, USA">
  <DISPUTES-GROUP>
    <DISPUTER service="http://www.PrivacySeal.org"
      resolution-type="independent"
      description="PrivacySeal, a third-party seal provider"
      image="http://www.PrivacySeal.org/Logo.gif"/>
  </DISPUTES-GROUP>
  <DISCLOSURE disclosure="http://www.CoolCatalog.com/Practices.html" access="none"/>
  <STATEMENT>
    <CONSEQUENCE-GROUP>
      <CONSEQUENCE>a site with clothes you would appreciate</CONSEQUENCE>
    </CONSEQUENCE-GROUP>
    <RECIPIENT><ours/></RECIPIENT>
    <RETENTION><indefinitely/></RETENTION>
    <PURPOSE><custom/><develop/></PURPOSE>
    <DATA-GROUP>
      <DATA name="dynamic.cookies" category="state"/>
      <DATA name="dynamic.misdata" category="preference"/>
      <DATA name="user.gender"/>
      <DATA name="user.home." optional="yes"/>
    </DATA-GROUP>
  </STATEMENT>
  <STATEMENT>
    <RECIPIENT><ours/></RECIPIENT>
    <PURPOSE><admin/><develop/></PURPOSE>
    <RETENTION><indefinitely/></RETENTION>
    <DATA-GROUP>
      <DATA name="dynamic.clickstream.server"/>
      <DATA name="dynamic.http.userAgent"/>
    </DATA-GROUP>
  </STATEMENT>
</POLICY>
  
```





## privacy notice



timing

channel

modality

control



blocking

non-blocking

decoupled

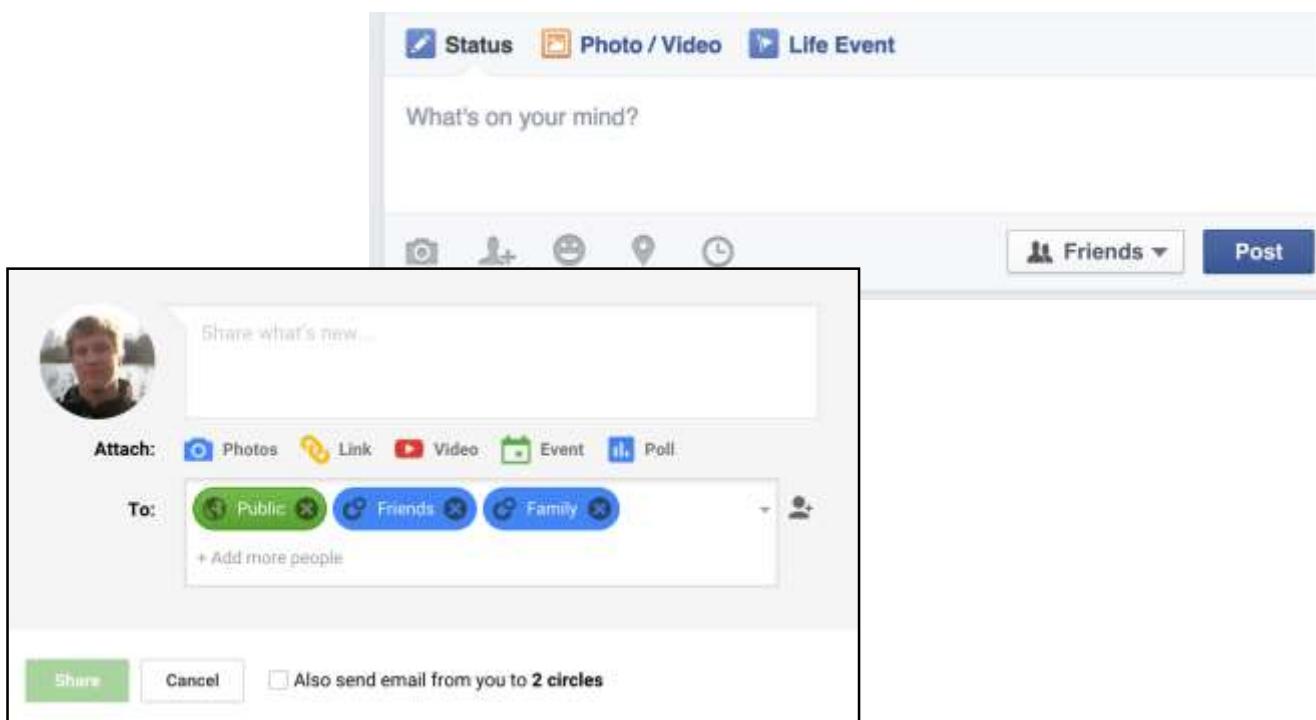
## privacy notice

timing

channel

modality

control

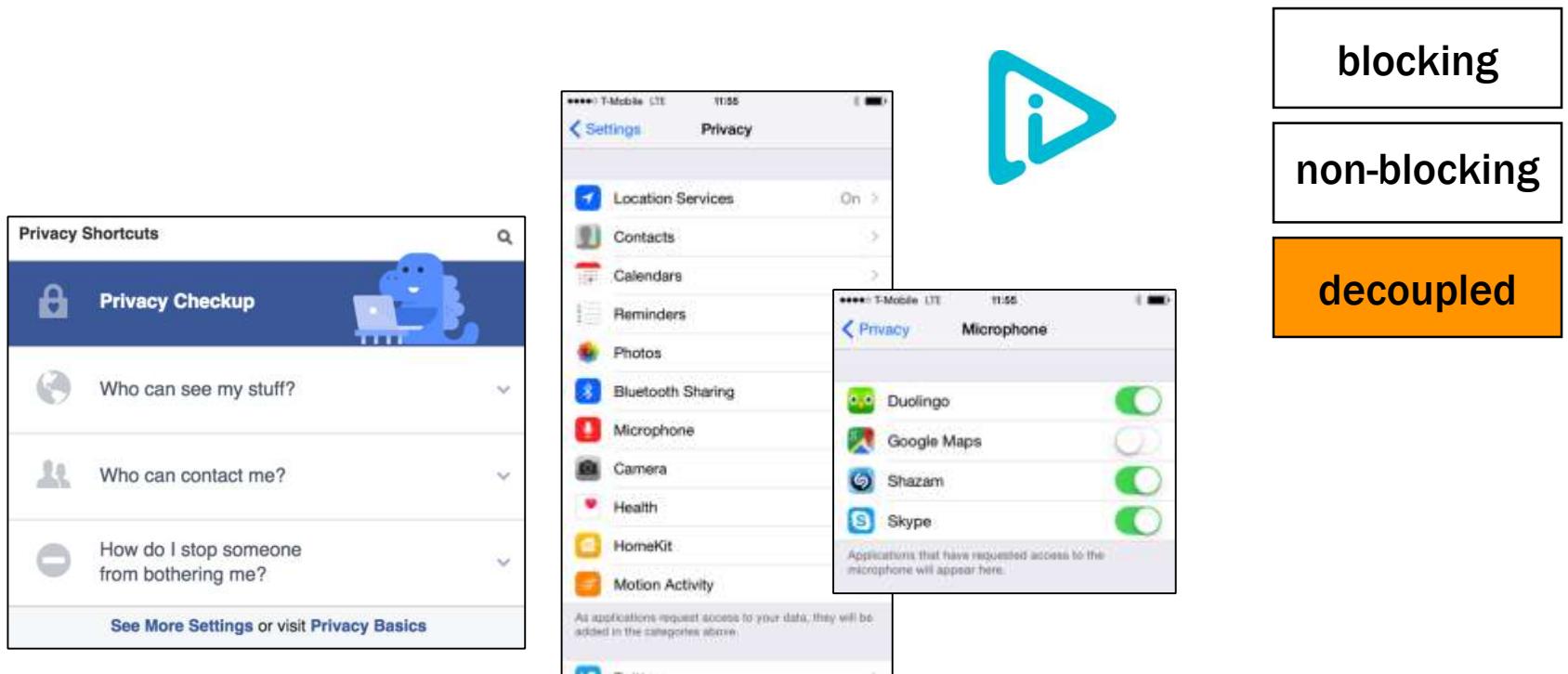
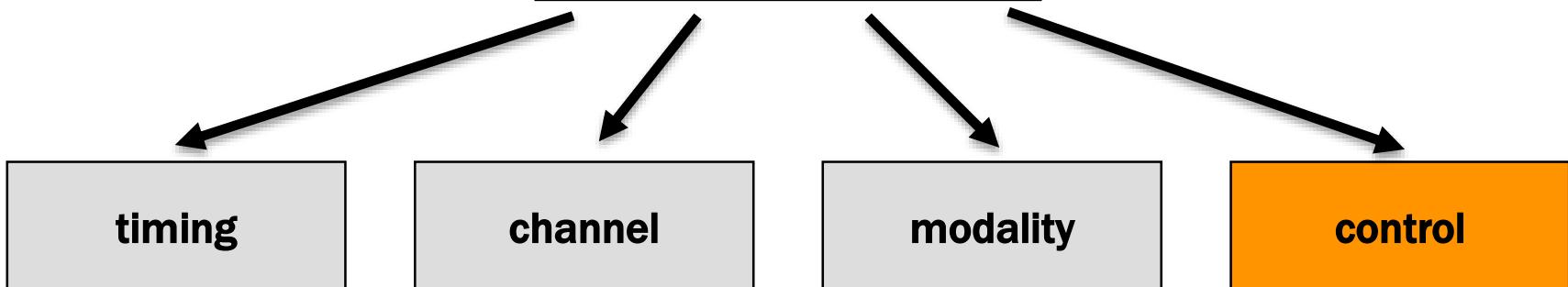


blocking

non-blocking

decoupled

## privacy notice



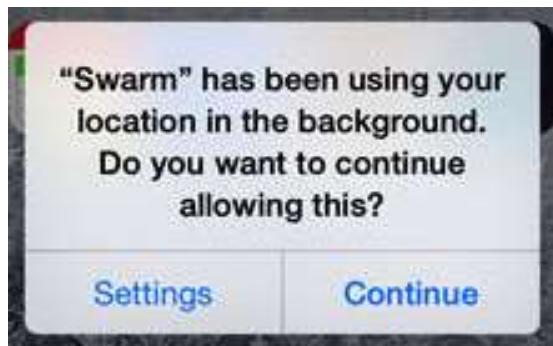
# Layered examples from iOS



just-in-time, primary visual, blocking



persistent, primary visual, non-blocking



periodic, primary visual, blocking



at setup, primary visual, blocking

on demand, primary visual, decoupled

Location Services  
Contacts  
Calendars  
Reminders  
Photos  
Bluetooth Sharing  
Microphone  
Camera  
Health  
HomeKit  
Motion Activity

Duolingo  
Google Maps  
Shazam  
Skype

Applications that have requested access to the microphone will appear here.

Legal      Home      Software      Sales & Channel      Services      Intellectual Property      More Resources

## Privacy Policy

The Apple Privacy Policy was updated on September 17, 2014.

Your privacy is important to Apple. So we've developed a Privacy Policy that covers how we collect, use, disclose, transfer, and store your information. Please take a moment to familiarize yourself with our privacy practices and let us know if you have any questions.

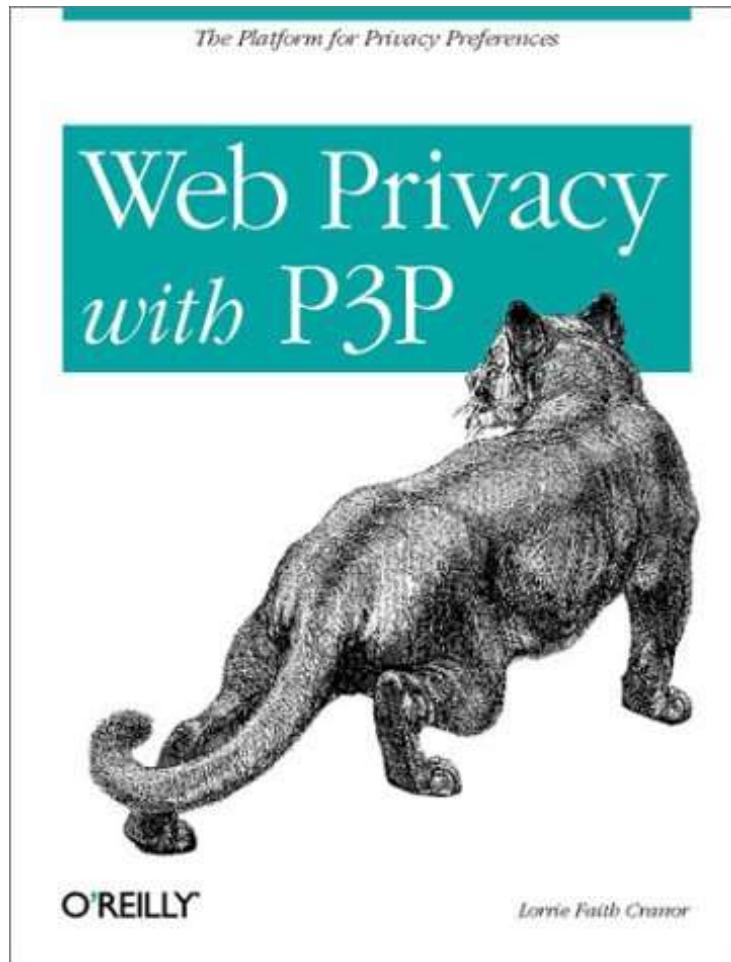
Your California Privacy Disclosure | Information Regarding Commercial Electronic Messages in Canada

on demand, secondary visual, decoupled

# Attempts at improving notice & choice

# Attempt: Machine- readable privacy policies

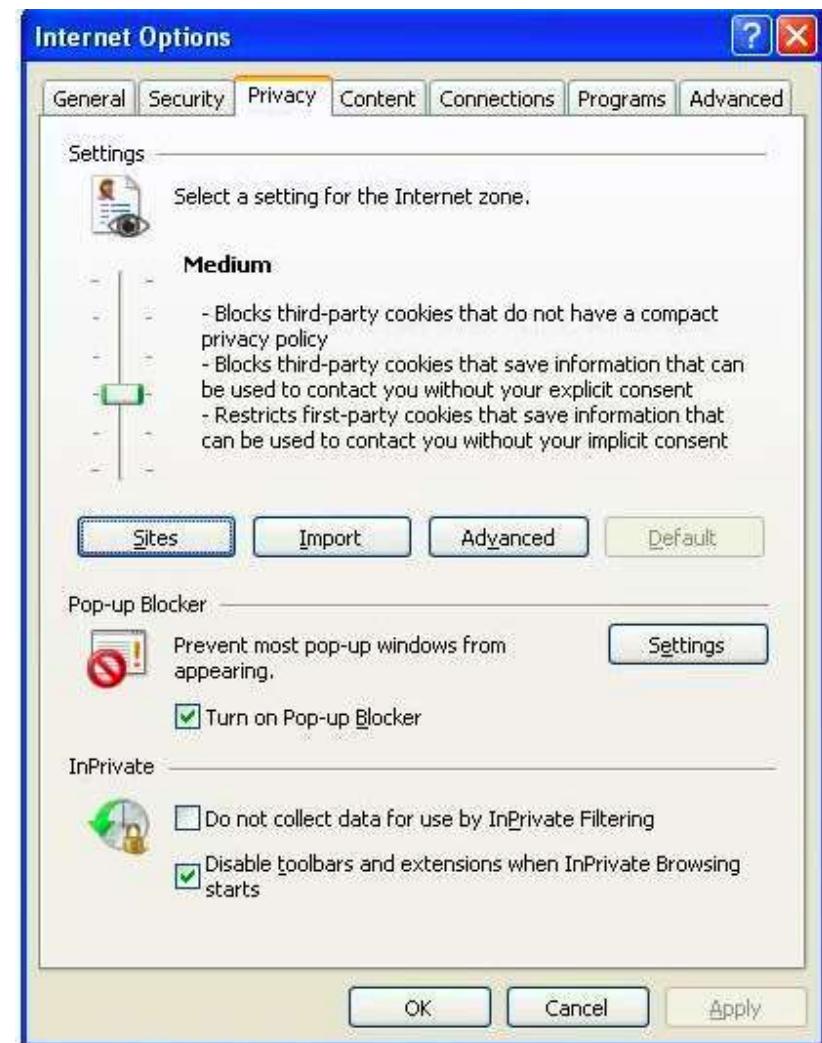
# Let your computer read for you



- 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>

P. Leon, L. Cranor, A. McDonald, and R. McGuire. Token Attempt: The Misrepresentation of Website Privacy Policies through the Misuse of P3P Compact Policy Tokens. WPES 2010.



merrell primo chill slide

Search

 Google Yahoo! Shopping

Search Engine:

Preference Level:

Medium



### [Merrell Primo Chill Slide - Men's Tan: Merrell Shoes](#)

[Privacy Report](#)

Buy Merrell Primo Chill Slide - Men's Tan and find Spring trends at Onlineshoes. Free Shipping and Exchanges on all Merrell!...

<http://yhs.trafficdashboard.com/track.htm?pid=1031...> - [Privacy Policy](#) - [Similar Pages](#)



\$89.95



### [merrell" Primo Chill Slide Shoes, Chocolate, Women's](#)

[Privacy Report](#)

Italian styled winter slide for convenience and warmth. Easy-on and water resistant, the Primo Chill gives your feet after-sport comfort in casual style. Water-resistant pigskin leather upper with sheepskin lining. Removable wool fleece footbed. Injection-molded nylon shank for increased arch support. Air Cushion EVA midsole for softer flex and increased comfort. Merrell Pilot sole with sticky rubber sports a weight-saving design that is siped and barred for traction....

<http://clickserve.cc-dt.com/link/ddiprod?lid=41000...> - [Privacy Policy](#) - [Similar Pages](#)



\$90.00



### [Merrell Primo Chill Slide](#)

[Privacy Report](#)

We heated up our stylish Italian standout slide with a sheepskin lining with removable footbed and a water resistant pigskin upper. Merrell Pilot Sole has a weight-saving cutaway configuration but is boldly siped and barred for wet and dry surface traction. Slip Lasted Construction. Water Resistant Pigskin Upper. Sheepskin Lining. Wool Fleece Footbed. Nylon 6. 6 Injection Molded Arch Shank. Compression Molded EVA Footframe. Air Cushion Midsole. Merrell Pilot Sole/Sticky Rubber....

<http://shopping.yahoo.com/p:Merrell%20Primo%20Chil...> - [Privacy Policy](#) - [Similar Pages](#)



\$89.95 - \$89.95



### [Merrell Primo Chill Slide \(Men's\)](#)

[Privacy Report](#)

We heated up our stylish Italian standout slide with a sheepskin lining with removable footbed and water resistant pigskin upper. Merrell Pilot Sole has a weight-saving cutaway configuration but is boldly siped and barred for wet and dry surface traction. FEATURES: Slip Lasted Construction, Water Resistant Pigskin Upper, Sheepskin Lining, Wool Fleece Foot-Bed, Nylon 6.6 Injection Molded Arch Shank, Compression Molded EVA Foot-Frame, Air Cushion Mid-Sole, Merrell Pilot Sole/Sticky Rubber. Available Colors: Black, Chocolate, Natural, Tan. J63253....

<http://www.shoebuy.com/cgi-bin/sbref.cgi?link=yps...> - [Privacy Policy](#) - [Similar Pages](#)



\$99.95

### [Merrell Shoes Primo Chill Slide - Men's](#)

Why limit your casual winter footwear wardrobe to unimaginative, straight-laced shoes? Merrell's Primo Chill Slides offer the slim-in convenience of traditional post-sport footwear

# Impact of privacy information on decision making

- Online shopping study conducted at CMU lab
- Paid participants to make online purchases with their own credit cards, exposing their own personal information
- Participants paid fixed amount and told to keep the change – real tradeoff between money and privacy
- Studies demonstrate that when readily accessible and comparable privacy information is presented in search results, many people will pay more for better privacy



<http://privacyfinder.org/>

J. Tsai, S. Egelman, L. Cranor, and A. Acquisti. The Effect of Online Privacy Information on Purchasing Behavior: An Experimental Study. WEIS 2007. <http://weis2007.econinfosec.org/papers/57.pdf>

S. Egelman, J. Tsai, L. Cranor, and A. Acquisti. 2009. Timing is Everything? The Effects of Timing and Placement of Online Privacy Indicators. CHI2009. <http://www.guanotronic.com/~serge/papers/chi09a.pdf>

# Attempt: Personalized privacy assistants

# Personal privacy assistants



Attempt: Make your own  
machine-readable  
privacy policies

# Use NLP to read policies

- Usableprivacy.org
- It's a hard problem
- Annotated corpus → machine learning

# Attempt: Crowdsourcing

# Terms of Service; Didn't Read

## SoundCloud Class B

- >You stay in control of your copyright
- Collected personal data used for limited purposes
- 6 weeks to review changes
- Indemnification from claims related to your content or your account
- Personal information can be disclosed in case of business transfer or insolvency

[More details](#)

## GitHub Class B

- You don't grant any copyright license to GitHub
- Changes can happen any time, sometimes without notice
- You shall defend and indemnify GitHub
- Your personal information is used for limited purposes
- Your account can be suspended and your data deleted any time for any reason

[More details](#)

## Twitpic Class E

- Twitpic takes credit for your content
- Your content is for Twitpic and their partners
- Reduction of legal period for cause of action
- You indemnify Twitpic from any claim related to your content
- Deleted images are not really deleted

[More details](#)

## Delicious Class D

- Very broad copyright license on your content, includes right for Delicious to distribute through any media
- No Right to leave the service
- Only for personal and non-commercial use
- [bad] delicious new terms 5. third party services get access to personal information
- Your personal information are an asset for business transfers

[More details](#)

# Attempt: Standardized notices

# Privacy Facts

## Privacy Facts

# Privacy Facts

# Privacy Facts

# 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

Acme		ways we use your information				information sharing	
information we collect		provide service and maintain site	marketing	telemarketing	profiling	other companies	public forums
contact information			opt out	opt out			
cookies							
demographic information			opt out	opt out			
financial information							
health information							
preferences			opt out	opt out			
purchasing information			opt out	opt out			
social security number & gov't ID							
your activity on this site			opt out	opt out			
your location							

**Access to your information**  
This site gives you access to your contact data and some of its other data identified with you.

**How to resolve privacy-related disputes with this site**  
Please email our customer service department:  
help@acme.com

acme.com  
5000 Forbes Avenue  
Pittsburgh, PA 15213 United States  
Phone: 800-555-5555  
help@acme.com

 we will collect and use your information in this way  
**opt out**

 we will not collect and use your information in this way  
**opt in**

 by default, we will collect and use your information in this way unless you tell us not to by opting out

 by default, we will not collect and use your information in this way unless you allow us to by opting in

P.G. Kelley, J. Bresee, L.F. Cranor, and R.W. Reeder. A “Nutrition Label” for Privacy. SOUPS 2009.

P.G. Kelley, L.J. Cesca, J. Bresee, and L.F. Cranor. Standardizing Privacy Notices: An Online Study of the Nutrition Label Approach. CHI 2010.

# Standardized financial notices

- Gramm-Leach-Bliley Act mandated annual disclosures
- In 2009, regulators created a recommended form
  - High adoption because of safe harbor

# Standardized financial notices

Rev. [insert date]

## 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]

When you are *no longer* our customer, we continue to share your information as described in this notice.

#### 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.

# Standardized financial notices

Reasons we can share your personal information	Does [name of financial institution] share?	Can you limit this sharing?
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		
For our marketing purposes—to offer our products and services to you		
For joint marketing with other financial companies		
For our affiliates' everyday business purposes—information about your transactions and experiences		
For our affiliates' everyday business purposes—information about your creditworthiness		
For our affiliates to market to you		
For nonaffiliates to market to you		

Questions?

Call [phone number] or go to [website]

# Standardized financial notices

Page 2

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 <ul style="list-style-type: none"><li>■ [open an account] or [deposit money]</li><li>■ [pay your bills] or [apply for a loan]</li><li>■ [use your credit or debit card]</li></ul> <p>[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.]</p>
Why can't I limit all sharing?	Federal law gives you the right to limit only <ul style="list-style-type: none"><li>■ sharing for affiliates' everyday business purposes—information about your creditworthiness</li><li>■ affiliates from using your information to market to you</li><li>■ sharing for nonaffiliates to market to you</li></ul> <p>State laws and individual companies may give you additional rights to limit sharing. [See below for more on your rights under state law.]</p>

# Standardized financial notices

## 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]*

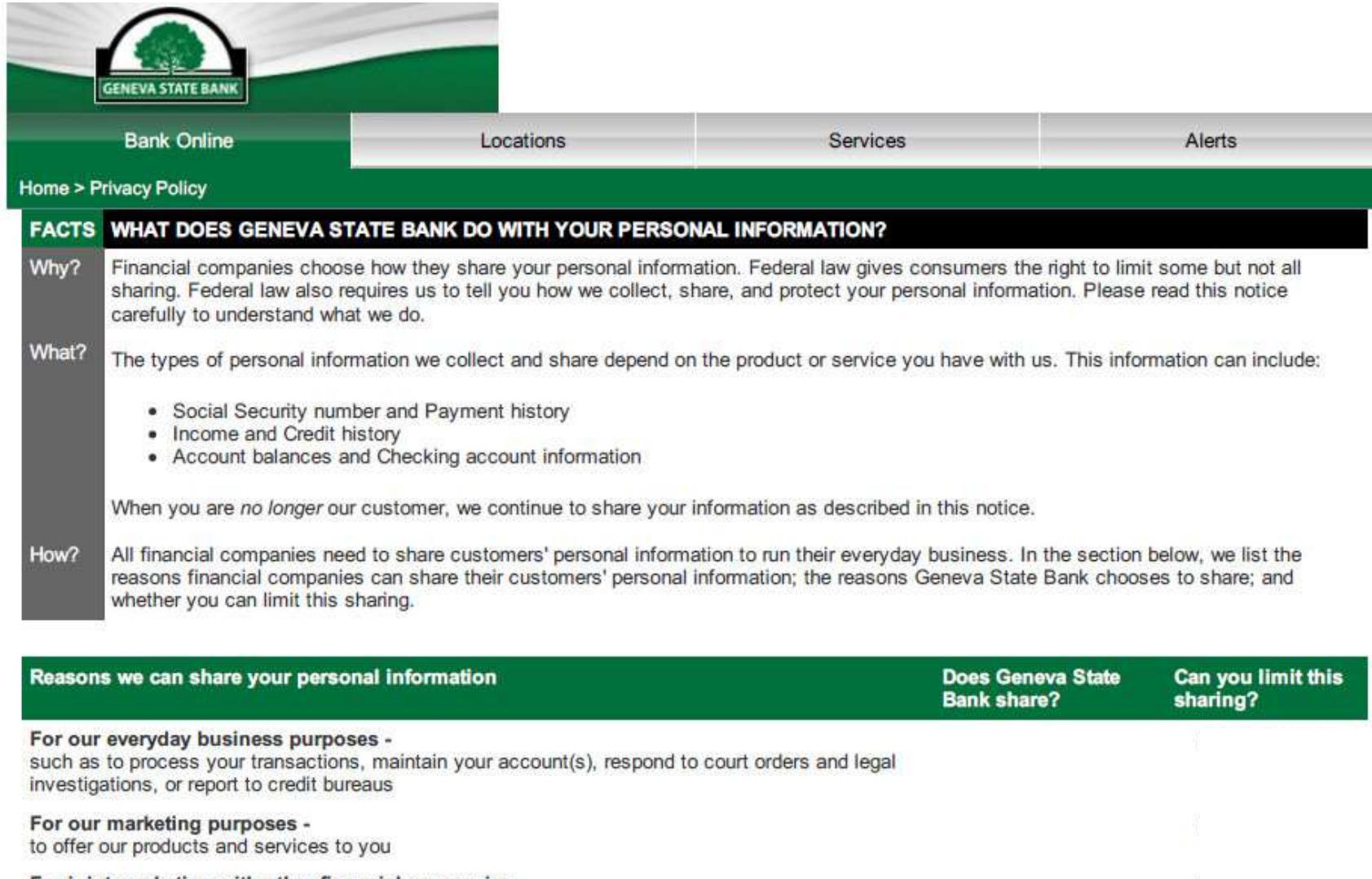
## Other important information

*[insert other important information]*

# Standardized financial notices

- Built a parser and built an online database
- Lets people compare practices
- <https://cups.cs.cmu.edu/bankprivacy>

# Messing up standardized notices



The screenshot shows the Geneva State Bank website with a green header featuring a tree logo and the bank's name. The navigation bar includes links for 'Bank Online', 'Locations', 'Services', and 'Alerts'. The current page is 'Privacy Policy', indicated by a green bar at the top. The main content area is titled 'FACTS' and 'WHAT DOES GENEVA STATE BANK DO WITH YOUR PERSONAL INFORMATION?'. It is divided into three sections: 'Why?', 'What?', and 'How?'. The 'Why?' section explains that financial companies share personal information and that federal law gives consumers the right to limit some sharing. The 'What?' section lists types of information collected, such as Social Security numbers, payment history, income, credit history, and account balances. It also notes that sharing continues after a customer is no longer a customer. The 'How?' section discusses the reasons financial companies share information, the reasons Geneva State Bank chooses to share, and the option to limit sharing. Below this, a table maps reasons for sharing to whether Geneva State Bank shares and if sharing can be limited.

Reasons we can share your personal information	Does Geneva State Bank share?	Can you limit this sharing?
<b>For our everyday business purposes</b> - such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus	Yes	Yes
<b>For our marketing purposes</b> - to offer our products and services to you	Yes	Yes
<b>For joint marketing with other financial companies</b>	No	No

# Attempt: Improve timing

# 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

comment

comment

Ad supported, with ability to upgrade to ad-free full version in game.

Uses the SOWPODS word list containing 100,000+ words. They may be obscure, but yes those are words!

## Privacy Facts

THIS APP COLLECTS YOUR

<input checked="" type="checkbox"/> Personal information	<input type="checkbox"/> Credit card / financial
<input type="checkbox"/> Contacts	<input type="checkbox"/> Diet / nutrition
<input checked="" type="checkbox"/> Location	<input type="checkbox"/> Health / medical
<input type="checkbox"/> Calendars	<input type="checkbox"/> Photos

THIS APP USES

<input type="checkbox"/> Advertising	<input checked="" type="checkbox"/> Analytics
--------------------------------------	---

## REVIEWS

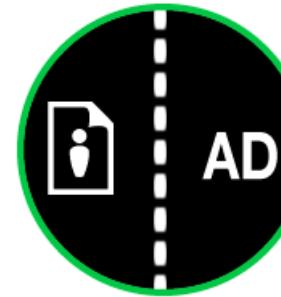
Average

4.6

★★★★★ 793

5 stars	534
4 stars	210
3 stars	37
2 stars	5
1 star	7

# Attempt: Icons



Attempt: Standardized  
disclosure icons

# 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



TM



Buy Now!



**AT&T.**  
The nation's  
**largest**  
**4G**  
**network.**

LEARN MORE

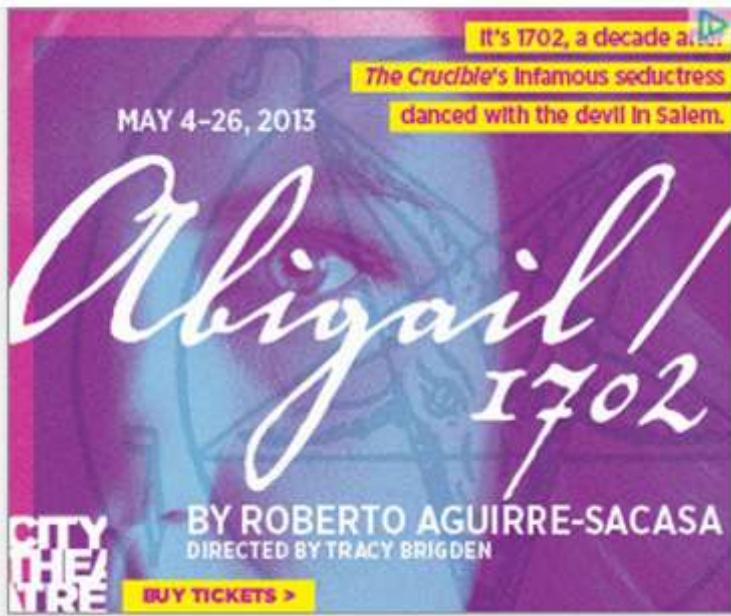
Rethink Possible



4G speeds not available everywhere.

MAY 4-26, 2013

It's 1702, a decade after  
The Crucible's infamous seductress  
danced with the devil in Salem.



**YAHOO!**  
--- ON THE ---  
**ROAD**

Don't miss a beat

Ad Feedback

AdChoices

# 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)”*



Peter Kosmala, Former Managing Director of The Digital Advertising Alliance. Yes, *Johnny Can Benefit From Transparency and Control*. November 3, 2011.

# 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

HOME PAGE | TODAY'S PAPER | VIDEO | MOST POPULAR | TIMES TOPICS

Subscribe: Home Delivery / Digital | Log In | Register Now

Why did I get this ad? 

# The New York Times

Tuesday, October 25, 2011 Last Update: 11:21 PM ET

CLICK HERE

Search

Follow Us    | Subscribe to Home Delivery Personalize Your Weather

Switch to Global Edition

**JOB**  
REAL ESTATE  
AUTOS  
ALL CLASSIFIEDS

**WORLD**  
U.S.  
POLITICS  
NEW YORK  
BUSINESS  
DEALBOOK  
TECHNOLOGY  
SPORTS  
SCIENCE  
HEALTH  
OPINION  
ARTS  
Books  
Movies  
Music  
Television  
Theater  
**STYLE**  
Dining & Wine  
Fashion & Style  
Home & Garden  
Weddings!

**Europe Faces New Hurdles in Crisis Over Debt**  
By STEVEN ERLANGER and RACHEL DONADIO 20 minutes ago  
On the eve of a European Union summit meeting, crucial financial measures were still unresolved.  
• Temps Flare as European Meeting Nears

**I.B.M. Names Virginia Rometty as New Chief Executive**  
By STEVE LOHR 22 minutes ago  
The selection of Ms. Rometty, a senior vice president at I.B.M., will make her one of the highest-profile women executives in corporate America.

**Archive Offers**

**THE WORLD SERIES**



Dilip Vishwanat for The New York Times

**Baseball's Game of Telephone**  
By PAT BORZI 3 minutes ago  
Monday night's bullpen debacle by the Cardinals has put a new spotlight on baseball's reliance on landlines.

**New Poll Finds a Deep Distrust of Government**  
By JEFF ZELENY and MEGAN THEE-BRENAN 3 minutes ago  
With Election Day just over a year away, a deep

OPINION »

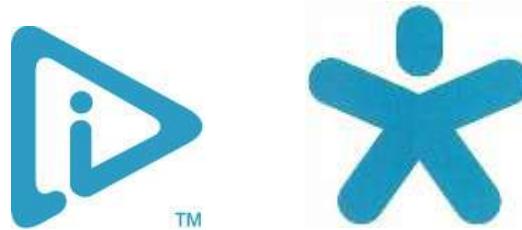
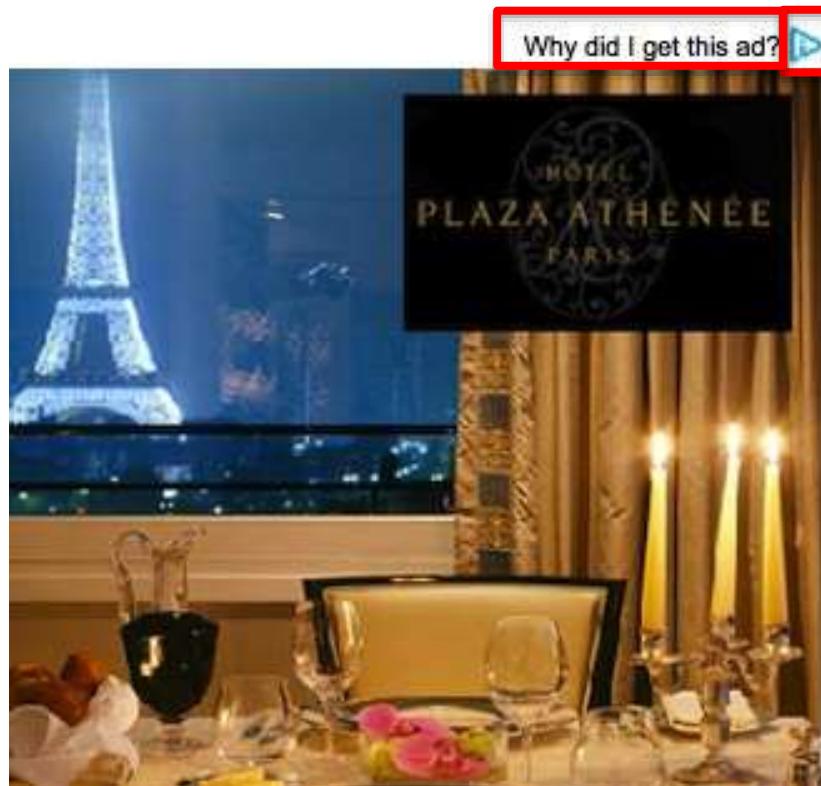
OP-ED | CLIFFORD WINSTON Are Law Schools and Bar Exams Necessary?  
The barriers to entry for the legal industry exist to protect lawyers from competition with non-lawyers.

• Brooks: The Fighter Fallacy |   
• Nocera: Jobs's Biographer  
• Cohen: Defending the E.U.  
• Bruni: Have Glock  
• Editorial: Refinancing  
• Room for Debate: Will Amazon Kill Off Publishers?

Why did I get this ad? 



# Second exposure to OBA disclosures

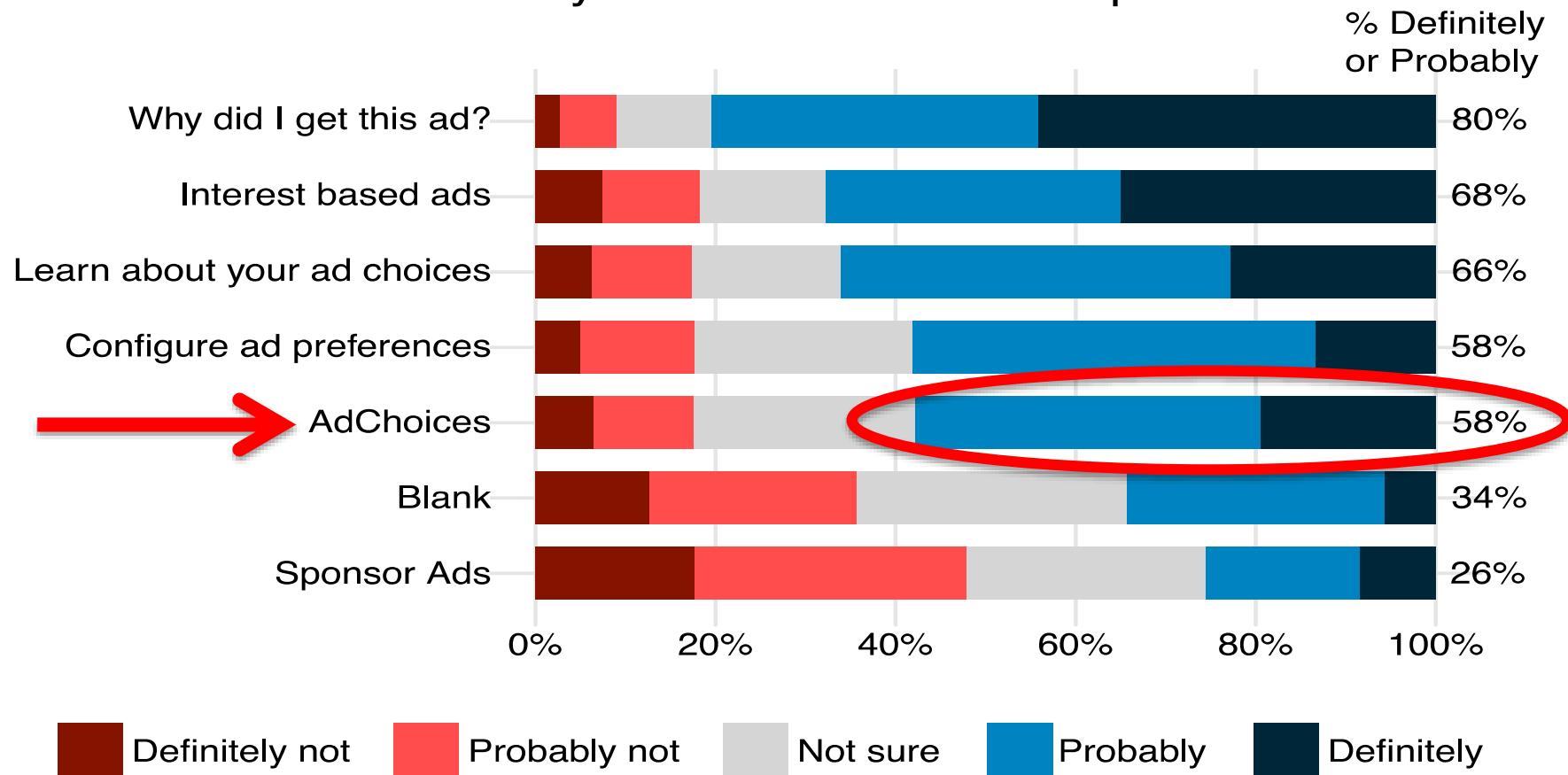


- Why did I get this ad?
- Interest based ads
- AdChoices
- Sponsor ads
- Learn about your ad choices
- Configure ad preferences
- 'No tagline'

# 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



# 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