

USABLE **PRIVACY**.ORG

the usable privacy policy project



**Carnegie
Mellon
University**



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Existing Legal Landscape

A notice and choice regime

Notice and Choice

Notice and Choice

Practical issues

Research Question:

Can we accurately interpret privacy policies?

Accurate Interpretation

“Disagreeable” privacy policies?

Accurate Interpretation

The screenshot displays the usableprivacy.com website. At the top is a dark navigation bar with the logo and links for User Profile, Task, Settings, and Logout. Below this is a search bar labeled "Search this policy". The main content area is divided into two columns. The left column, titled "time.com", contains a "PRIVACY POLICY" section with a "Table of Contents" listing various topics like "The Information We Collect", "How We Use the Information", "Privacy Options", and "Your California Privacy Rights". It also includes sections for "European Union Privacy Information" and "Canada Privacy Information". The right column, titled "Answer the following questions", features a link to "view the instructions again", a "Question:" section asking if the policy states that the website might collect contact information, and four radio button options: "No", "Yes", "Unclear", and "Not applicable". Below the question is a text box containing a sentence from the policy: "Your personally identifiable information may be required to engage in these activities as well as to receive products and services that you may have requested." At the bottom of the right column are buttons for "Next", "Your Progress", and "Jump directly to question".

usableprivacy User Profile Task Settings Logout

Search this policy

time.com

Sports Illustrated
PRIVACY POLICY

Table of Contents

The Information We Collect
How We Use the Information
Privacy Options
Your California Privacy Rights: Notice to California Customers
Collection of Information by Third-Party Sites and Sponsors
Cookies
Our Commitment to Security
Accessing, Correcting, and Deleting Your Personal Information
Retention of Personal Information
Special Note for Parents
Changes to this Privacy Policy
How to Contact Us
Safe Harbor Privacy Policy

European Union Privacy Information
For citizens of member countries of the European Union, and
Switzerland, Norway, Lichtenstein, Iceland, Australia, and New Zealand

Canada Privacy Information

This is the Privacy Policy which applies to you if you live outside the
European Union, Switzerland, Norway, Lichtenstein, Iceland, Australia,
New Zealand, and Canada.

Answer the following questions

[Click here to view the instructions again](#)

Question:
Does the policy state that the website might collect
contact information about its users?

Select sentence from policy and click Remove last selection

Your personally identifiable information may be required to
engage in these activities as well as to receive products and
services that you may have requested.

☐ **No** - the policy explicitly states that the website will not collect
contact information.

☐ **Yes** - the policy explicitly states that the website might collect
contact information.

☐ **Unclear** - the policy does not explicitly state whether the website
might collect contact information or not, but the selected
sentences could mean that contact information might be
collected.

☐ **Not applicable** - this question is not addressed by this policy.

Next

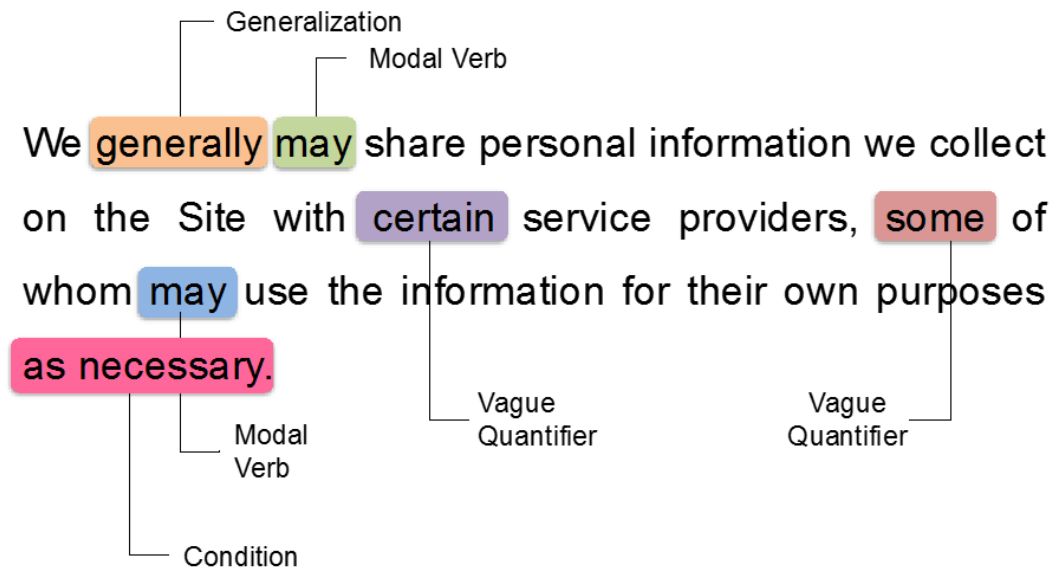
Your Progress

Jump directly to question

Categories of Ambiguity

Categories of Vague Terms	
<i>Category</i>	<i>Description</i>
Condition	Action(s) to be performed are dependent on a variable or unclear trigger
Generalization	Action(s)/Information Types are vaguely abstracted with unclear conditions
Modality (including modal verbs)	Vague likelihood of action(s) or ambiguous possibility of action or event
Numeric quantifier	Vague quantifier of action/information type

Annotated Example



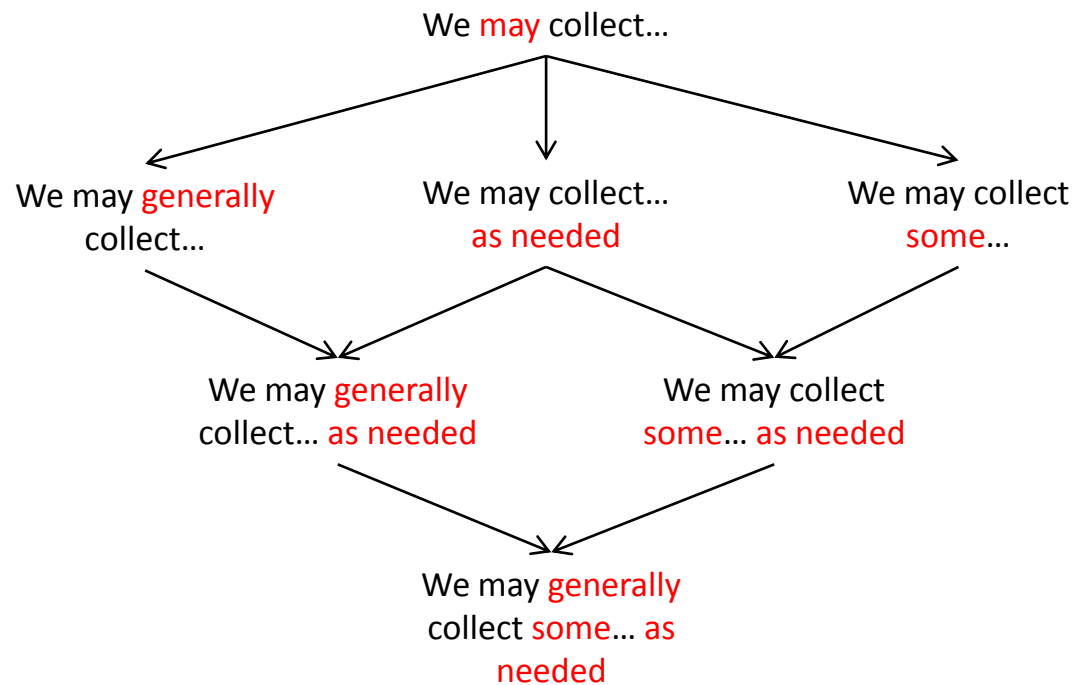
Grounded analysis

Type of Site	Policy	Last policy update
<i>Shopping</i>	Barnes and Noble	05/07/2013
<i>Shopping</i>	Costco	12/31/2013
<i>Shopping</i>	JC Penny	05/22/2015
<i>Shopping</i>	Lowes	04/25/2015
<i>Shopping</i>	Over Stock	01/09/2013
<i>Telecommunications</i>	AT&T	09/16/2013
<i>Telecommunications</i>	Charter Communication	05/04/2009
<i>Telecommunications</i>	Comcast	03/01/2011
<i>Telecommunications</i>	Time Warner	09/2012
<i>Telecommunications</i>	Verizon	10/2014
<i>Employment</i>	Career Builder	05/18/2014
<i>Employment</i>	Glassdoor	09/09/2014
<i>Employment</i>	Indeed	2015
<i>Employment</i>	Monster	03/31/2014
<i>Employment</i>	<u>SimplyHired</u>	4/21/2010

Taxonomy from Grounded Analysis

Category	Examples of Vague Terms
Condition	depending, necessary, appropriate, inappropriate, as needed
Generality	generally, mostly, widely, general, commonly, usually, normally, typically, largely
Modality	may, might, can, could, would, likely, possible, possibly, unsure, often
Numeric Quantifier	anyone, certain, everyone, numerous, some, most, few, much, many, various

Vagueness Lattice



Paired Comparison Study

For each numbered question, please read each pair of statements, and identify which of the two statements best represents ***a more clear description*** of the company's treatment of personal information.

- ☐ We share your personal information as needed.
- ☐ We generally may share some of your personal information.

Bradley Terry Model

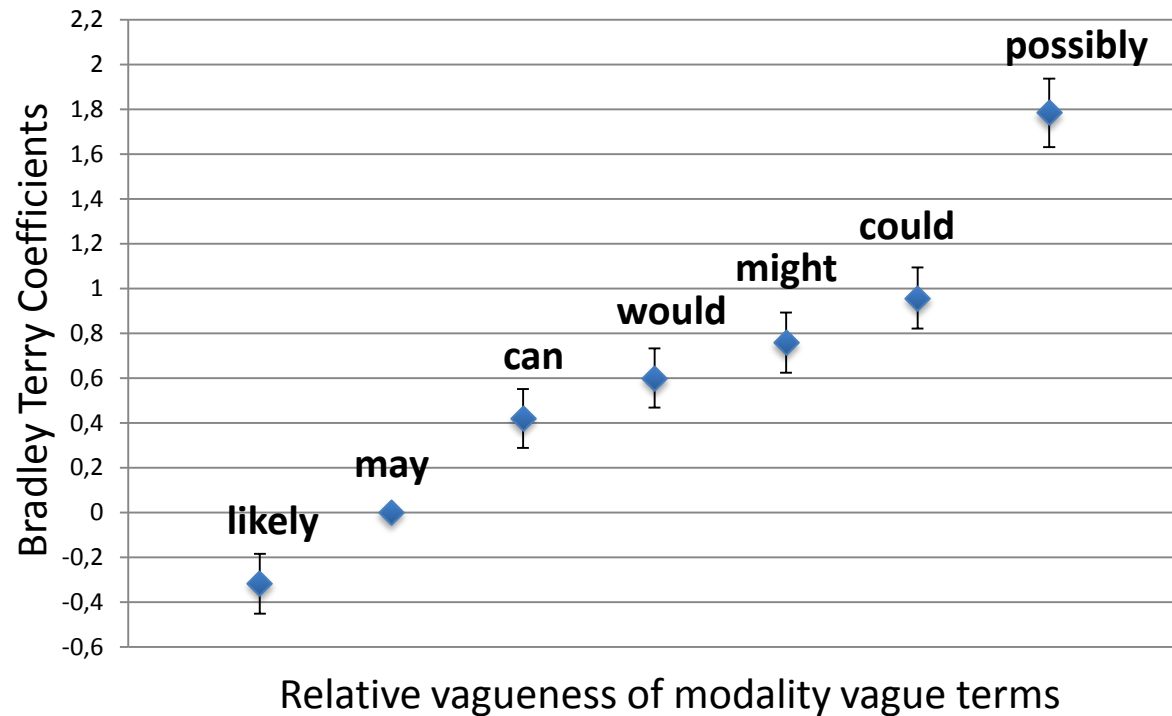
Intra-category results

TABLE VII. BRADLEY TERRY COEFFICIENTS FOR INTRA-CATEGORY VAGUENESS

	Vague term	Coefficient	Standard Error
Conditionality	as needed	0.00	0.00
	as necessary	0.01	0.15
	as appropriate	0.70	0.14
	depending	0.77	0.14
	sometimes	1.20	0.15
	as applicable	1.37	0.15
	otherwise reasonably determined	1.52	0.15
	from time to time	1.81	0.15
Generality	typically	-0.38	0.11
	normally	-0.34	0.11
	often	-0.15	0.11
	general	-0.11	0.11
	usually	-0.04	0.11
	generally	0.00	0.00
	commonly	0.03	0.11
	among other things	0.64	0.11
	widely	0.67	0.11
	primarily	0.70	0.11
	largely	1.25	0.13
	mostly	1.71	0.14
Num .Q.	certain	-0.53	0.22
	most	-1.21	0.24
	some	0.00	0.00
Modality	likely	-0.32	0.13
	may	0.00	0.00
	can	0.42	0.13
	would	0.60	0.13
	might	0.76	0.13
	could	0.96	0.14
	possibly	1.78	0.15

Bradley Terry Model

Modality Category Survey



Applications to Improve Clarity

- *Technical tools*: NLP/ML to scan and extract vague language for improvement and enforcement
- *Linguistic guidelines*: minimize/avoid combinations with generalization terms and, if using terms, favor those with lower BT coefficients
- *Reporting framework*: public reporting of scores to encourage ratchet effect

Notice and Choice

Legal issues

Regulating Online Privacy / Remedying Privacy Harms

Individuals and the FTC perceive online privacy harms that warrant redress

- **When individuals experience perceived wrongs, they litigate**
- **When the FTC perceives commercial practices that cause significant harm, they bring enforcement actions**

Research Question:

Whether notice and choice theory aligns with the actual harms that consumers / users experience

Universe of Online Privacy Litigation

- **165 Class Action Cases**
- **116 FTC Enforcement Complaints Relating to Privacy**

Categorization of Harms as Articulated by Litigation Claims

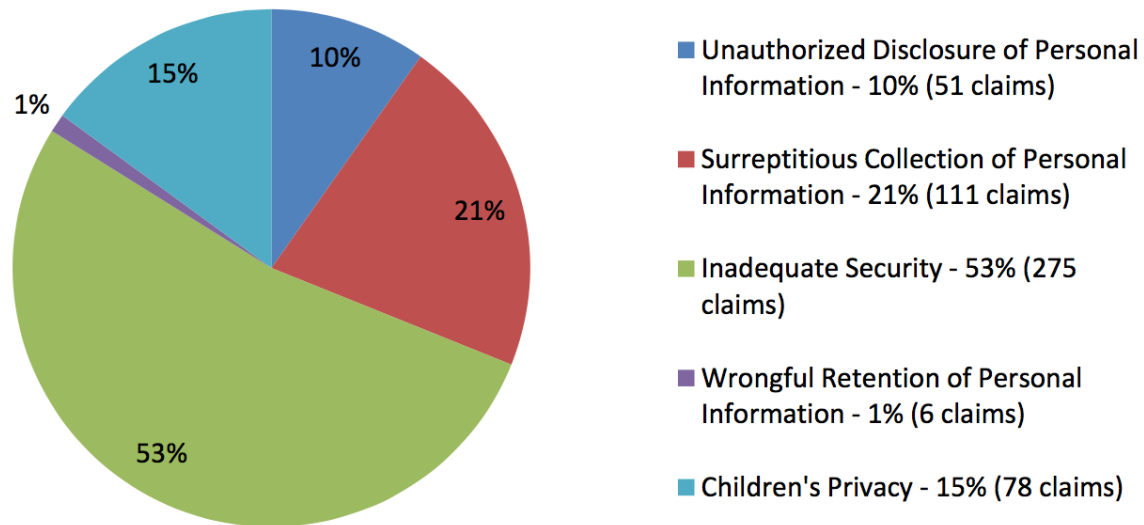
- If wrongs litigated in the real world reveal the most important privacy harms that consumers experience**
- Then, four types of claims appearing in both private litigation and public enforcement with respect to personal information are most important to consumers**

Categorization of Harms as Articulated by Litigation Claims

- Unauthorized disclosure of personal information
- Surreptitious collection of personal information
- Failure to secure personal information
- Unlawful retention of personal information

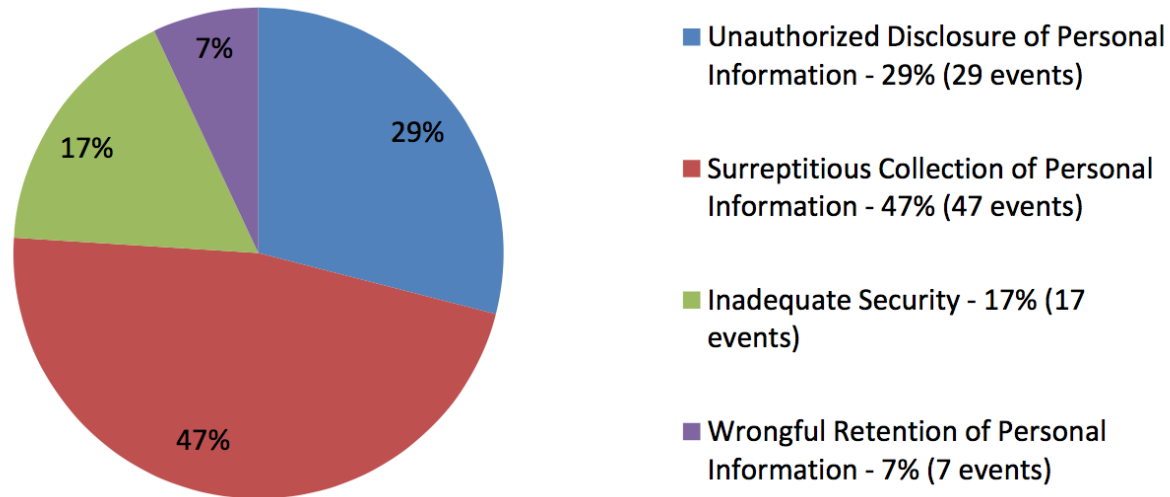
Categorization of Harms as Articulated by Litigation Claims

Most Frequently Claimed Violations of Online Privacy Rights (FTC)



Categorization of Harms as Articulated by Litigation Claims

Most Frequently Asserted Online Privacy Harms (Class Action Litigation)



Inside or Outside the “Zone of Effectiveness” for Notice and Choice?

- So, if wrongs litigated in the real world reveal areas where the notice and choice framework may or may not be effective to protect us online
- Then, notice and choice may or may not be effective to address perceived harms

Inside or Outside the “Zone of Effectiveness” for Notice and Choice?

- Some of the perceived harms are not capable of resolution *ex ante* by notice and choice
- While others may be meaningfully addressed through advance notice

Areas Where Notice and Choice May Satisfy User Autonomy

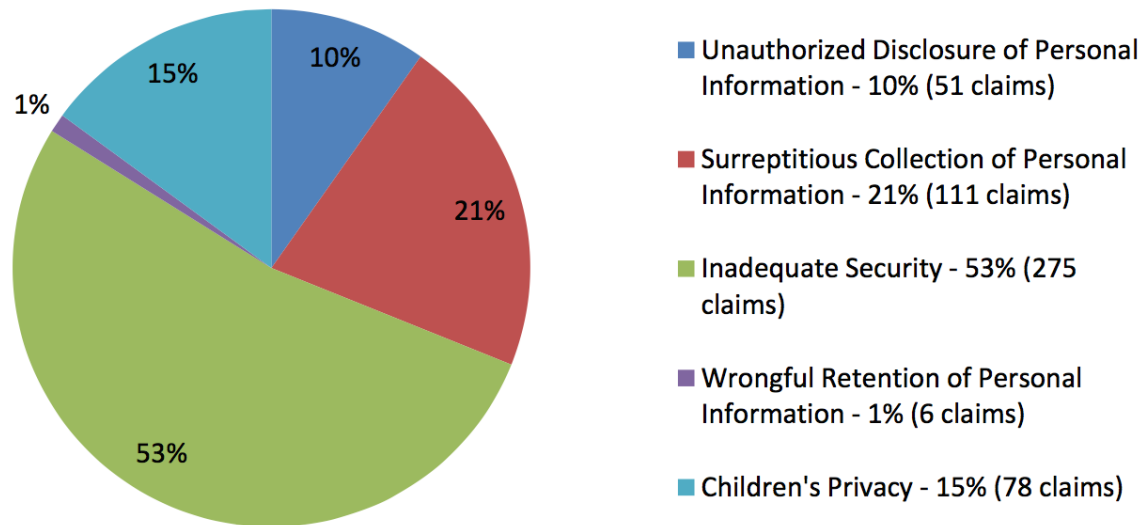
Privacy Harm	Conditions for Adequacy	Why Avoids the Harm by Providing Meaningful Consent
Unauthorized disclosure of personal information	Accurate and detailed descriptions of data sharing	Gives notice of what and when information is shared, with whom it is shared and how recipient will use information
Surreptitious collection of personal information	Transparent data collection	Provides notice of <u>all</u> methods of collection and <u>all</u> types of data collected
Unlawful retention of personal information	Durational specificity – No silence on data retention	Specifically states a right to retain indefinitely or establishes a time limit on data retention

Areas Where Notice and Choice Cannot Possibly Satisfy User Autonomy

Privacy Harm	Conditions for Inadequacy	Why Cannot Avoid the Harm
Unauthorized disclosure of personal information	Breach of commitments made in written terms and policies; straying beyond what is disclosed in the notice	Notice and choice cannot resolve the problem of broken privacy promises
Inadequate security of personal information	Exceeding baseline standards for security that cannot be waived or disclaimed	Notice itself does not keep personal information technically secure
Unlawful retention of personal information	A “mismatch” between stated duration and business need; vagueness or permissiveness regarding storage duration	Despite stating a period of retention, users perceive “unreasonable storage durations” as a harm

Categorization of Harms as Articulated by Litigation Claims

Most Frequently Claimed Violations of Online Privacy Rights (FTC)



Another Aspect of Research

Grading Privacy

Another Aspect of Research

“Rating Indicators”

Research Question:

Can we identify the legal and policy criteria necessary for the development of meaningful and successful privacy rating indicator systems?

Examples of prior and current attempts at rating indicators:



Your data may be bartered or sold.



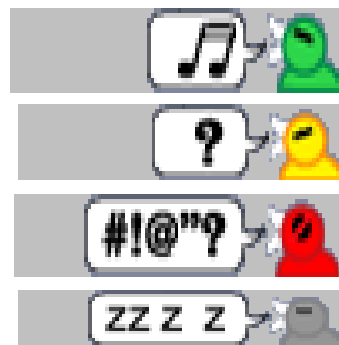
Your data is never bartered or sold.



Your Data May be Used for Purposes You Do Not Intend



Your Data is Used Only for the Intended Use



The "ESRB Privacy Certified" seal signifies that a general audience website complies with global privacy laws and best practices.



The "ESRB Privacy Certified for Kids" seal signifies that a child-directed website or app complies with applicable laws and requirements such as COPPA.



The "ESRB Privacy Certified for Mobile" seal signifies that a mobile app complies with mobile privacy standards and best practices.

Potential deficiencies and obstacles for rating indicators:

- **Scoring criteria**
 - Selection of grading criteria
 - Weighting of grading criteria
- **Interpretation issues**
- **Rating agent reliability**
- **Lack of Standardization**

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Another Aspect of Research

**How to develop meaningful and successful privacy
rating indicators**

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For more information and copies of the papers:

<http://www.usableprivacy.org>

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