Connected Life Market Watch
Overcoming Privacy Concerns To Profit from Advanced Advertising

Cisco Internet Business Solutions Group (IBSG)
June 2010
Three Constituencies Exert Influence on Future of Advertising and Privacy

**Legal / Regulatory**
- Telecommunications Act
- Cable Act
- Federal / state laws
- Franchise agreements

**Regulatory Agencies**
- Federal Communications Commission (FCC)
- Federal Trade Commission (FTC)
- State / local governments

**Governed by Laws**
- Telecommunications Act
- Cable Act
- Federal / state laws
- Franchise agreements

**Media**
- Reporters / analysts
- Editorials / incident coverage

**Advocacy Groups**
- American Civil Liberties Union (ACLU)
- Electronic Frontier Foundation (EFF)
- Center for Digital Democracy (CDD)
- Center for Democracy and Technology (CDT)
- Electronic Privacy Information Center (EPIC)

**Industry Players**
- Web service providers (WSPs)
- Service providers (SPs)
- Marketers
- Data brokers
- Broadcasters / networks
- Industry associations

Source: Cisco IBSG, 2010
## Regulatory and Industry Positioning: Self-Regulation Is Dominant Theme

### Federal Trade Commission (FTC)
- FTC proposes governing principles for behavioral advertising (Nov. 2007, Feb. 2009)
  - Transparency / consumer control
  - Reasonable security / limited data retention
  - Affirmative express consent

### Service Providers (United States)
- Three of four largest U.S. SPs pledge to follow voluntary code of conduct (Sept. 2008)
  - Prefer opt-in framework for all behavioral advertising
  - Prefer self-regulation over new laws

### Advertising Associations
- Four key advertising associations develop self-regulatory principles (Jan. 2009)
  - Work together for enhanced self-regulatory principles for online behavioral advertising
  - Address privacy concerns / increase customer trust
  - Take responsibility to ensure privacy

Public Opinion: Concerns and Misperceptions Abound

Internet Privacy Survey

- Internet companies should **always ask for permission** before using personal information: 93%
- Concerned about **tracking and profiling** of online behaviors by companies: 72%
- Want **right to opt out** when companies track online behavior: 72%
- Confident **online behavior is private and not shared** without permission: 61%
- Incorrectly believe **companies must explain** data-collection processes and use policies: 57%
- Incorrectly believe **consent is required** to use personal information collected online: 48%
- Incorrectly believe a **court order is required** to monitor activities online: 43%

Source: Consumer Reports National Research Center, 2008
Public Opinion: Some People Are Willing To Share Personal Data

- Nearly 40% of consumers indicate some willingness to share information
- People between 25 and 29 are most likely to share location information
- People younger than 24 are most comfortable sharing behavioral information

**Data-Sharing Receptivity**

Are you comfortable letting your SP use personal information to tailor advertisements to you?

- 57% Uncomfortable
- 26% Somewhat Uncomfortable
- 13% Somewhat Comfortable
- 3% Comfortable

**Information Shared Online**

What data are you comfortable letting your SP use to deliver targeted advertisements?

- Home Address
- Specific Location
- TV Usage Patterns
- Internet Usage
- Services Purchased
- None of the Above

Source: Cisco IBSG Connected Life Market Watch, 2009
Public Opinion: Globally, Receptivity Remains in Early Market

- 75% of consumers are “uncomfortable” sharing information for improved ads
- Americans are most “uncomfortable” sharing personal information
- More than 25% of Asian consumers are “comfortable” sharing some information

Receptivity to Sharing Information

Are you comfortable letting your SP use personal information to tailor advertisements to you?

**United States**
- 57% Very Uncomfortable
- 26% Somewhat Uncomfortable
- 13% Somewhat Comfortable
- 3% Comfortable

**Western Europe**
- 46% Very Uncomfortable
- 29% Somewhat Uncomfortable
- 20% Somewhat Comfortable
- 5% Comfortable

**Select Asian (China, India, S. Korea)**
- 31% Very Uncomfortable
- 42% Somewhat Uncomfortable
- 22% Somewhat Comfortable
- 6% Comfortable

Source: Cisco IBSG Connected Life Market Watch, 2009
Public Opinion: Advocacy Groups Have Agendas (and Attention)

<table>
<thead>
<tr>
<th>Contextual Advertising</th>
<th>Deep Packet Inspection (DPI) / Other Tracking Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What:</strong> Content-based ad delivery</td>
<td><strong>What:</strong> Behavioral targeting</td>
</tr>
<tr>
<td><strong>Position:</strong> If transparent and data collection / retention minimal, practice poses little risk</td>
<td><strong>Position:</strong> Like postal service reading your mail</td>
</tr>
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</table>

**Behavioral Advertising**
- **What:** Matches ads to interests over time
- **Position:** Raises serious questions since offline data may also be merged with online profiles; self-regulation has not worked

**Concerns**
- Tracking / storing private activity
- No consumer visibility
- Perceived use of data
- External party involvement
- Lack of / limited regulation

**Wants**
- No / limited collection, storage, sharing
- Transparency and consent
- Per-user usage expectations
- Stronger regulation

**Information Grouping**
- Interaction vs. preference vs. profile vs. behavioral
- In context vs. out of context
- Data from customer vs. data from third party

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**Strategy:** Establish guidelines / protections to:
1) Ensure consistency with consumers’ privacy expectations
2) Ensure data is tailored to proposed use; not kept / sent to third parties
3) Ensure customers are informed / have consented to information use
Unlocking the Opportunity

Industry Must Address Privacy Concerns

- Despite potential multibillion dollar market, consumer privacy concerns could derail opportunity
- Consumers, regulators, and advocacy groups are skeptical about sharing more information in exchange for “better” advertising
- Cisco IBSG has developed a comprehensive methodology to quickly evaluate privacy risks associated with advanced advertising options
- With the right approach, individual control, and choice, consumers will embrace advanced advertising

Advanced advertising can become an accepted information service that delivers real value

Source: Cisco IBSG, 2010
# Information Grouping: Two Key Dimensions To Understand Risk

## 1. Customer Data Interactions

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Preference</th>
<th>Profile</th>
<th>Behavioral</th>
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<tbody>
<tr>
<td>User-initiated data used for specific purpose</td>
<td>Dynamically configurable service / feature data</td>
<td>Static individual / household data</td>
<td>Data inferred from past activity / interactions</td>
</tr>
<tr>
<td>Context limited to time-bound action</td>
<td>Customer-provided preference data</td>
<td>Customer data used for specific purpose / service</td>
<td>Activities captured, analyzed, used for unintended action</td>
</tr>
</tbody>
</table>

### From Customer, in Context
- Data given to SPs by customers; data from observing / tracking customer behavior
- Data used within context of related services

### From Customer, out of Context
- Data given to SPs by customers; data from observing / tracking customer behavior
- Data used outside related service
- Data collected from one platform and used in another platform

### Enriched Third-Party Data
- Information gathered from public / private sources that enriches data analysis and is governed by commercial relationships among vendors, database providers, and customers

Source: Cisco IBSG, 2010
# Information Grouping:
Nine Critical Areas Must Be Evaluated

<table>
<thead>
<tr>
<th>2. Data Source / Use</th>
<th>1. Customer Data Interactions</th>
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<tbody>
<tr>
<td></td>
<td>Interaction</td>
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<td>From Customer, in Context</td>
<td>Implicit opt-in</td>
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<td>Examples</td>
<td>Interactive ads</td>
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Source: Cisco IBSG, 2010
# Information Grouping: Established and Emerging Guideposts Exist

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<td>From Customer, in Context</td>
<td>Online Interactive Ads / RFI</td>
<td>Information Services</td>
<td>Membership-Based Marketing</td>
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<tr>
<td>From Customer, out of Context</td>
<td>Preference-Based Marketing</td>
<td>Membership- / Viewing-Based Ads, Sales, Recommendations</td>
<td>Profile-Based Marketing</td>
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<td>Enriched Third-Party Data</td>
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<td></td>
<td>Combined Online / Offline Data-Based Ads</td>
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Source: Cisco IBSG, 2010
Privacy Risk Assessment: Unique Risk Profiles Exist for Every SP

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<tr>
<td>From Customer, in Context</td>
<td>Lower consumer sensitivity</td>
<td>Dynamic user control</td>
<td>Reasonable customer expectations</td>
<td>Low customer expectations</td>
</tr>
<tr>
<td>Examples</td>
<td>Search, n-DVR, TVEX</td>
<td>Alerts: VoD ad based on movie preference</td>
<td>Targeted ad using account data</td>
<td>Targeted ad using viewing data</td>
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<td>From Customer, out of Context</td>
<td>Dynamic user control</td>
<td>Low customer expectations</td>
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<tr>
<td>Examples</td>
<td>Vacation ad based on weather alert preference</td>
<td>Credit assistance ad based on late bill payment history</td>
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Source: Cisco IBSG, 2010

Higher consumer sensitivity
Open to debate

Higher consumer sensitivity
Service Providers that Focus on Positive Consumer Experiences Can Succeed…

Increased Utility

- Consumers more receptive to ads that are relevant to them
- Can be achieved by ads that are:
  - Tailored to specific customer demographics
  - Targeted based on consumer-identified interests
  - Customized through location / other contextual queues

Source: Cisco IBSG Connected Life Market Watch, 2009; Base: U.S. Broadband Consumers
Advertisements “as” Applications

- Branded applications related to developers’ core business are rising
- Widgets and other useful sources of commonly requested information present new advertising inventory options

Advertisements “in” Applications

- Applications increasingly contain topical advertisements linked to information requests
- SPs increasing application footprints

Source: Cisco IBSG, 2010
Advanced Advertising Must Deliver Incremental Value to Consumers, SPs

- Address consumer privacy concerns with education and long-term commitment to building trust
- Avoid public relations pitfalls by implementing communications plan before any new advertising capability is deployed; provide clear explanation of consumer benefits and safeguards
- Define consumer utility as benefit customers can clearly articulate
- Deliver superior experience by improving all aspects of previous service

Source: Cisco IBSG, 2010