

## **Ecosystem Challenges**

Some things to address before we get to the promised land

Tao of Attributes Workshop

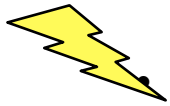
Paul Trevithick, September 29<sup>th</sup> 2009

## **Incentives and Barriers**

- For consumer IdP businesses
- For RP organizations
- For users

## Incentives and Barriers

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- For RP organizations
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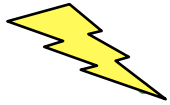


• And how by scoping this problem down to the government space the Feds might help us all forward

## RP Organizations

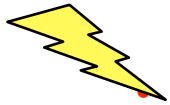
- Increased traffic
- Cost reduction
- Fraud reduction
- Confusion caused by of competing standards with no unifying framework and messaging
- Unwillingness to lead
- Lack of multi-protocol enabling libraries, tooling
- Attribute schemas battleground
- Disjointed user experience (esp. across protocols)

## RP Organizations



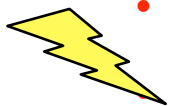
**Increased traffic** [but to get it, they'll need to offer entirely new experiences]

- ~~Cost reduction~~
- ~~Fraud reduction~~
- Confusion caused by of competing standards with no unifying framework and messaging



**Unwillingness to lead** [The Feds can lead: the needle moved 2 weeks ago]

- Lack of multi-protocol enabling libraries, tooling



**Attribute schemas battleground** [Maximal mismatch with IP, proliferation]

- Disjointed user experience (esp. across protocols)

## Consumer IP Businesses

- New business/revenue opportunities
- Opportunity to become the user's "trusted advocate"
- Brand killers (banks, telcos, consumer brands)
- Liability created by RP negligence! (market inversion)
- Open standards increase competition, decrease lock-in

**PayPal**

**Bank of America**



**PRIVO**  
PRIVACY, PERMISSION & TRUST



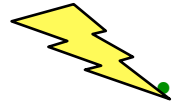
**YAHOO!**

**ACXIOM**

**Google**

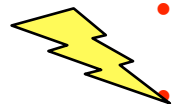
**EQUIFAX**

## IP Businesses



- New business/revenue opportunities [Feds need to address this]

- Opportunity to become the user's "trusted advocate"



- Brand killers (banks, telcos, consumer brands)

- Liability created by RPs! [Feds need to address this]

- Open standards increase competition, decrease lock-in



## User

- New experiences (empowerment, control, capabilities)
- Increased convenience
- Increased security and privacy
- Confusing user experience (esp. with multiple protocols)
- Learning and behavior change
- Selector required for some uses
  - Lack of roaming across devices
  - Immature mobile implementations
  - Download hassle

## Status Quo: Inconvenient



- I have too many accounts and passwords
- My personal information is spread all over the web
- I have no clean way to control my digital footprint, GPS data, presence, preferences, social networks

## Status Quo: Insecure



- Passwords are easily phished

## Status Quo: “nothing to do” personalization



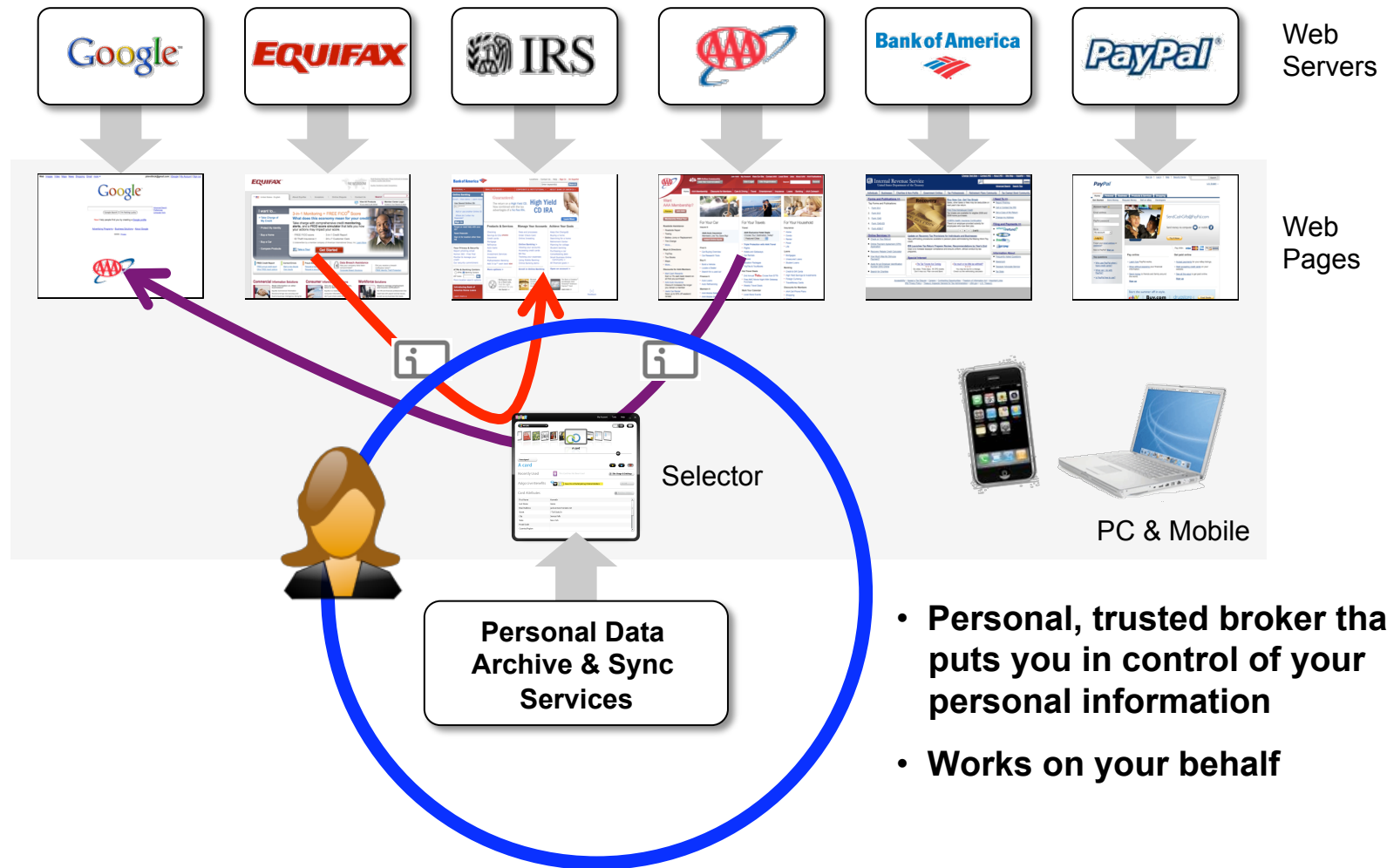
- Data aggregators and ad networks make markets in user data
- Little transparency, notice, consent
- A little bit creepy

## Status Quo: Attributes don't move freely



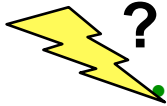
- Little ability to move attributes from place to place
- No ability for me to assert verified 3<sup>rd</sup> party attributes

# Identity/Attribute Broker





**User**



**New experiences (empowerment, control, capabilities)**

- Increased convenience
- ~~Increased security and privacy~~
- Confusing user experience (OpenID?, Cards?, what?)
- Learning and behavior change
- Selector required for some uses
  - Spotty platform coverage
  - Lack of roaming across devices
  - Immature mobile implementations
  - Download hassle

# Example: “Action” Relationship Cards

The image shows a Google search for "flowers" on the left and a screenshot of the AAA website's "DISCOUNTS" page on the right. A red arrow points from the AAA logo in the search results to the AAA logo on the website. The AAA website page features a navigation menu with "MEMBERSHIP", "AUTOMOTIVE", "TRAVEL", "INSURANCE", "DISCOUNTS", and "MAPS & DIRECTIONS". The "DISCOUNTS" section is titled "DISCOUNTS - show your card & save" and includes a sub-section for "FTD.com" with "Member Benefits". The benefits state that AAA members save 20% on floral arrangements and provide contact information for FTD.COM consultants. A "Visit Web site" link is also present. On the right side of the website, there is an "Everyday Savings" section with a list of categories: Automotive, Dining/Specialty Food, Entertainment, Lodging, Prescriptions, Services, Shopping, Travel, and eTravel Store. A "QUICK LINKS" section is also visible at the bottom right.

Uses local “web augmentation” driven by identity information from local Azigo selector