





## Social Networking and Security: The Business Risks of Employee Information Sharing

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## Gateway Data (noun):

Data that seems harmless but, when used properly, can facilitate access to highly sensitive information.









### **Direct Use**

Conversion of public data to access through defined rules

## **Amplification**

Conversion of public data to private data by bouncing it off a person

## Collective Intelligence

Correlating employee behavior to uncover sensitive corporate information













# Direct Use Gateway Data: Data directly convertible into access through rules







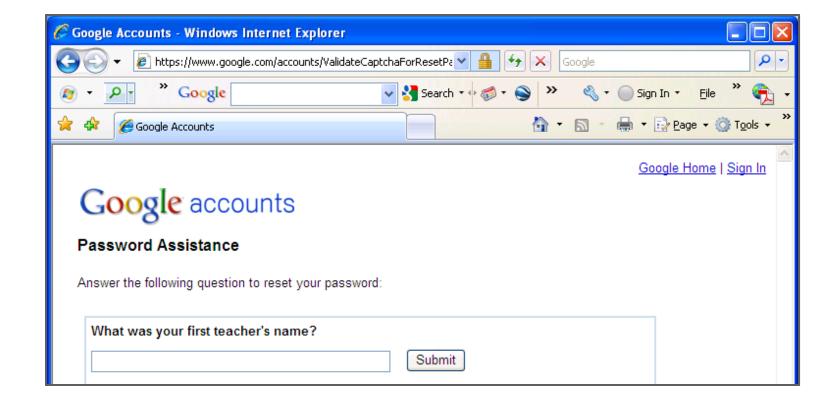


What is your pet's name?
Where were you born?
What was your first teacher's
name?
What is the mascot of your
favorite team?
What was your first phone
number?
What is your favorite restaurant?
Who is your favorite singer?
Where was your first job?











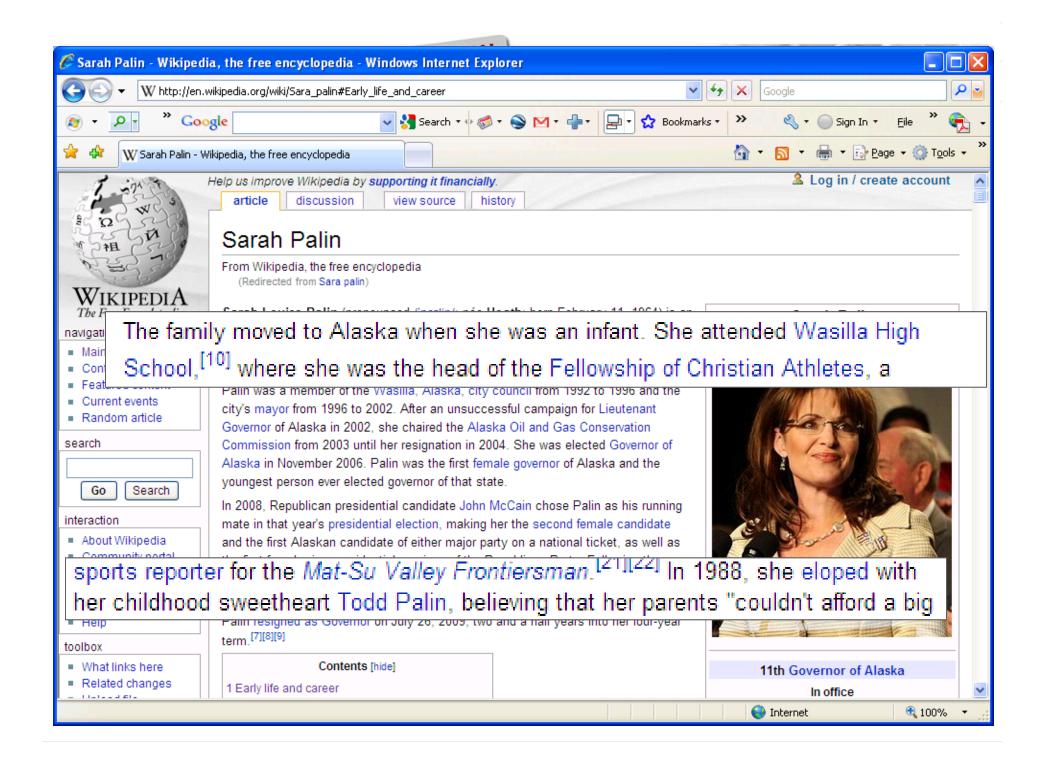
Step 1: Reconnaissance

Old resumes, LinkedIn, Twitter, Facebook, blogs, friends/family blogs, public online records, etc.

Step 2: Attempt Resets Click on "Forgot your password?" or similar links. What do they ask for? What do they reveal?

Step 3: Identify Dependencies Most people's online identities have a common root. Is it one email address? A mobile phone?

Step 4: Secure the Root Once you've identified core dependencies, do what you can to strengthen the common root.



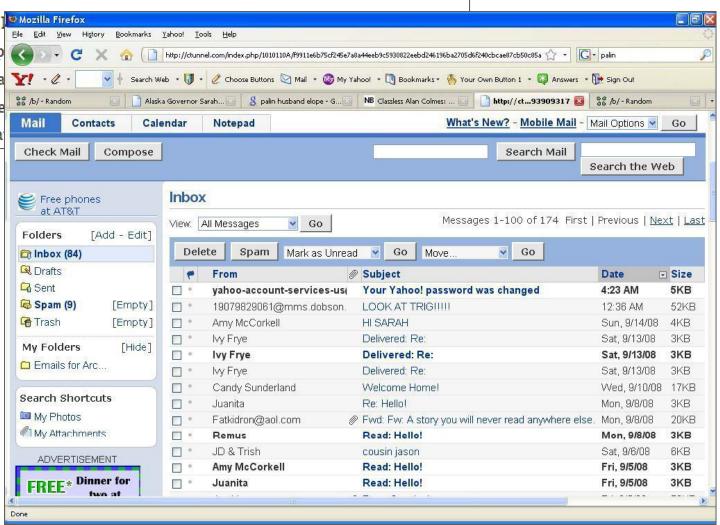


Wednesday, Sep. 17, 2008

## Sarah Palin's E-Mail Hacked

By M.J. Stephey

The cryptic Internet posse target in Republican vice-p members of Anonymous, a 4Chan, apparently breache (qov.palin@yahoo.com) la









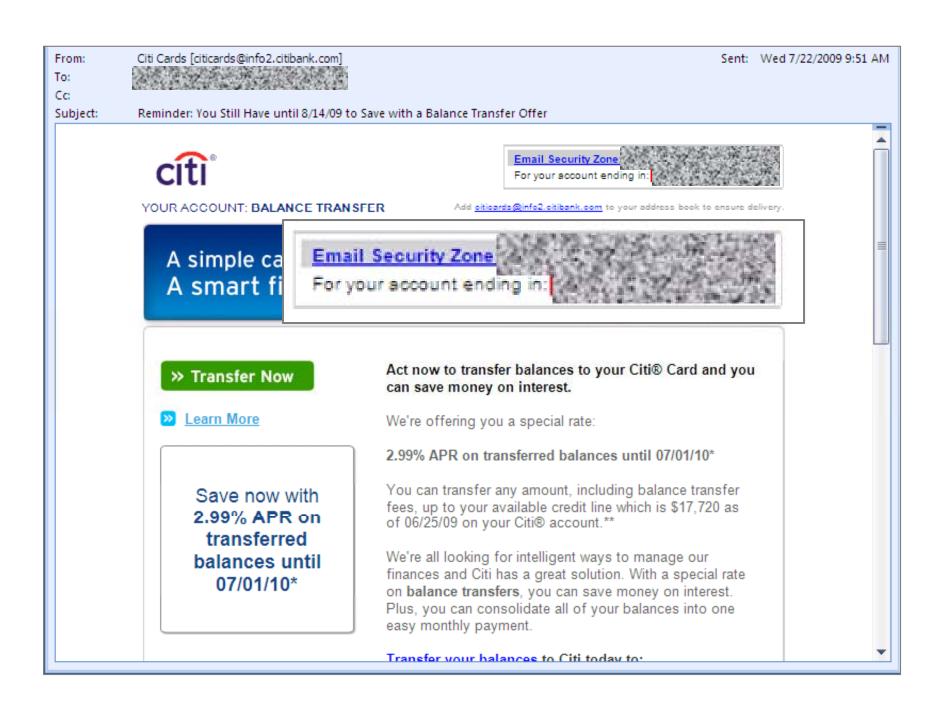


## **Amplification Gateway Data:**

data that can be amplified when bounced off a person.



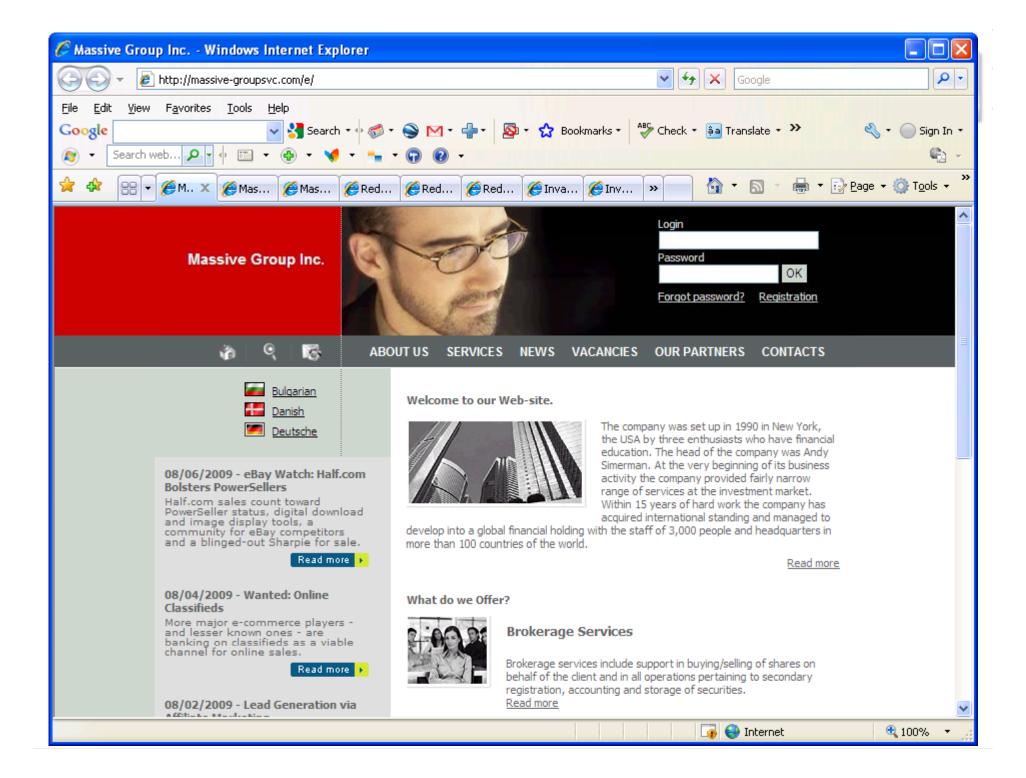


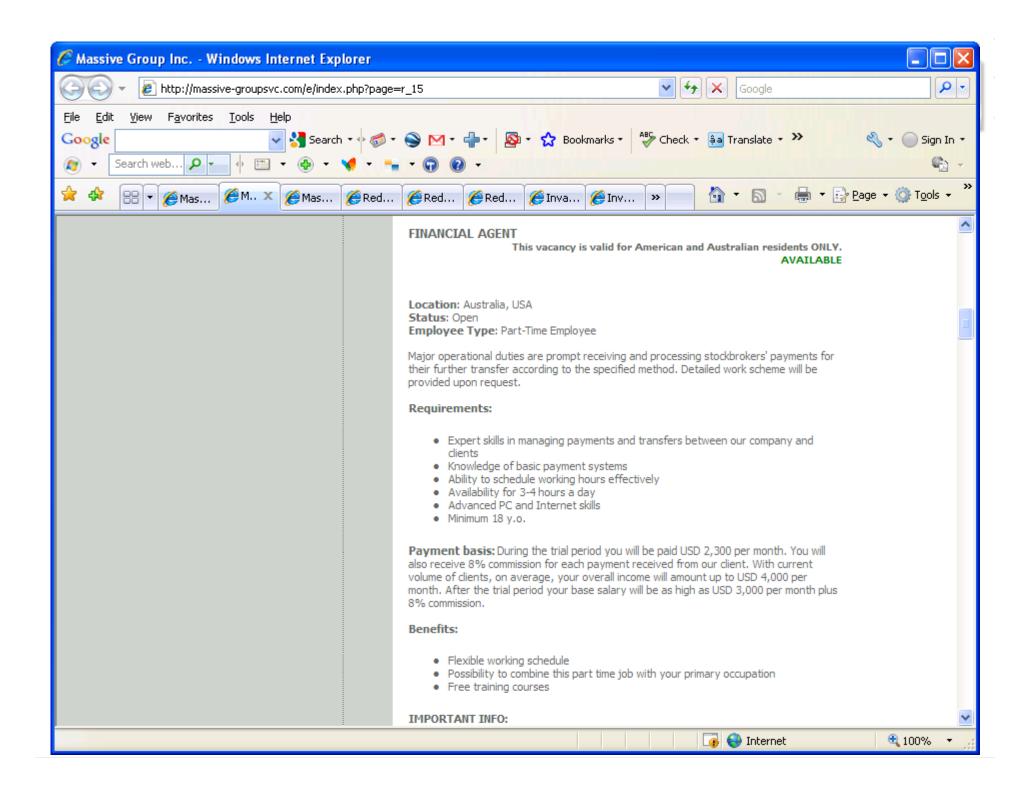


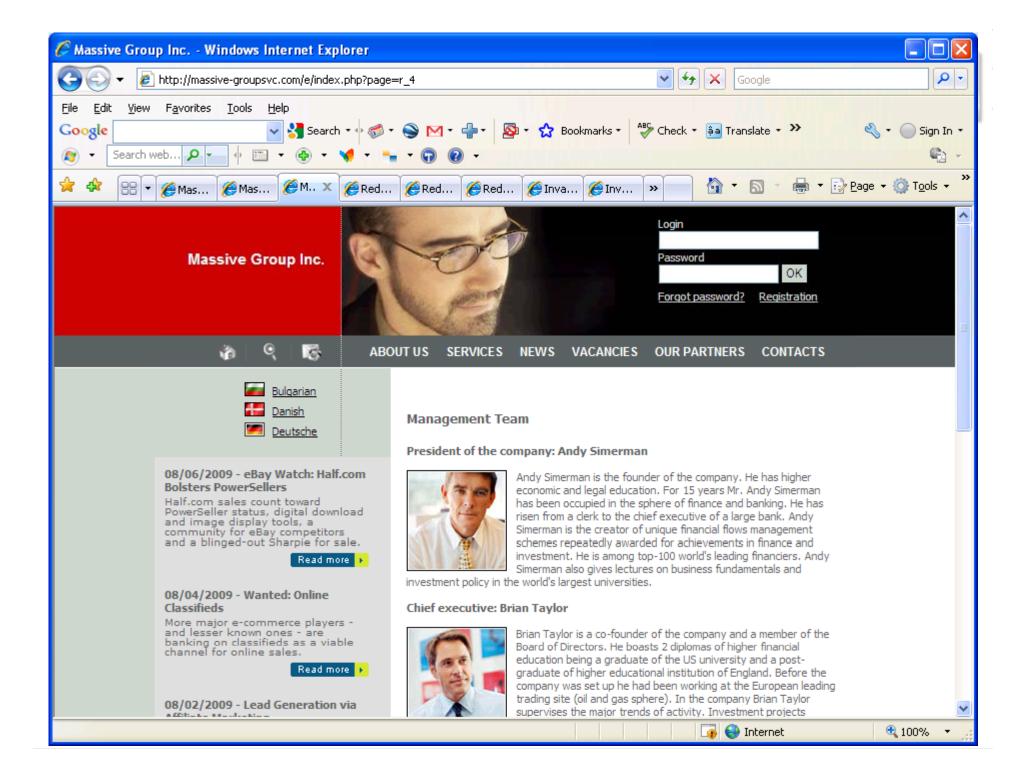


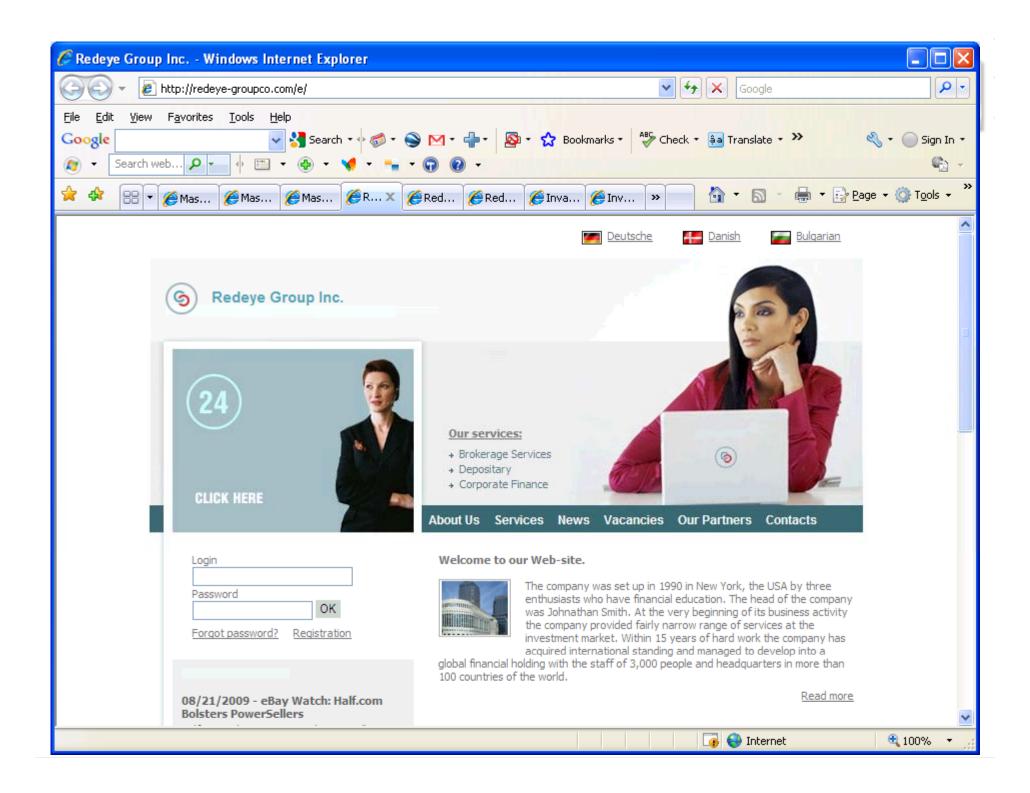


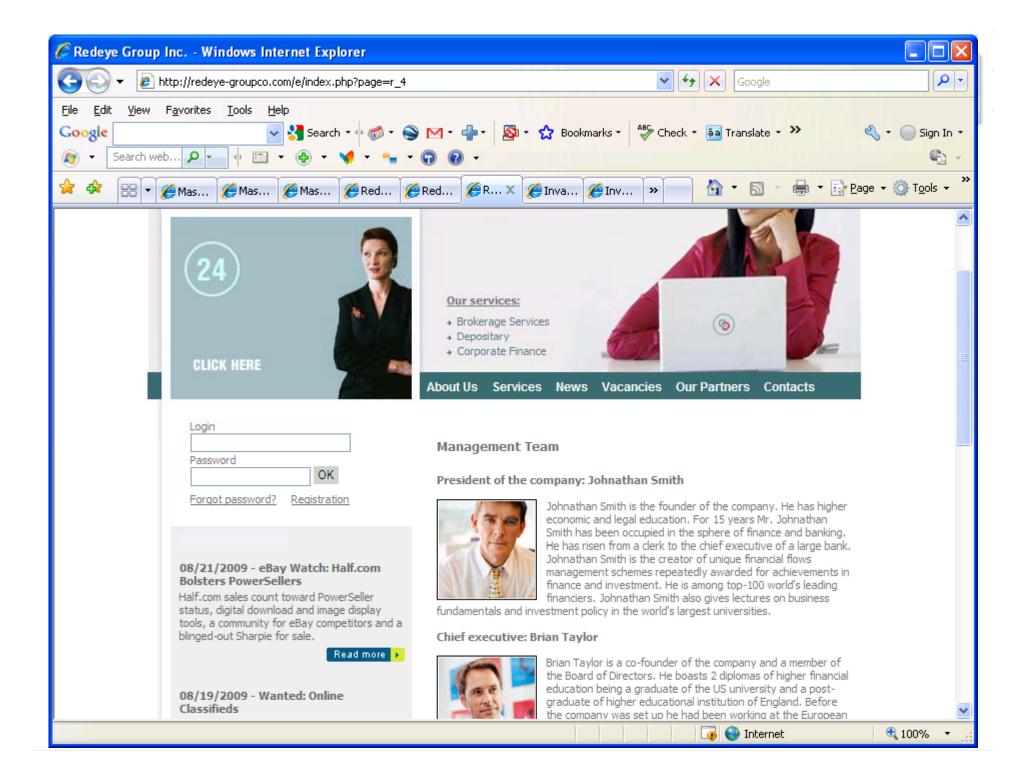
Credit Card	First 4 Digits	Total Digits
American Express	34xx or 37xx	15
VISA	4xxx	13 or 16
MasterCard	51xx-55xx	16
Discover	6011	16

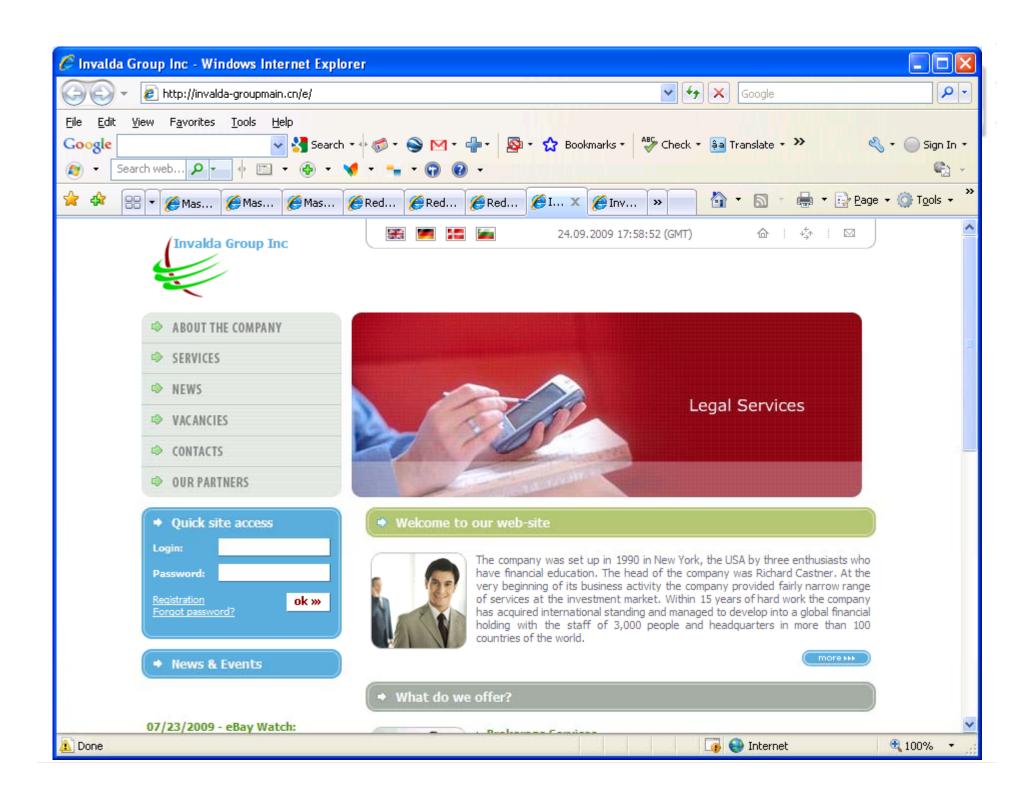


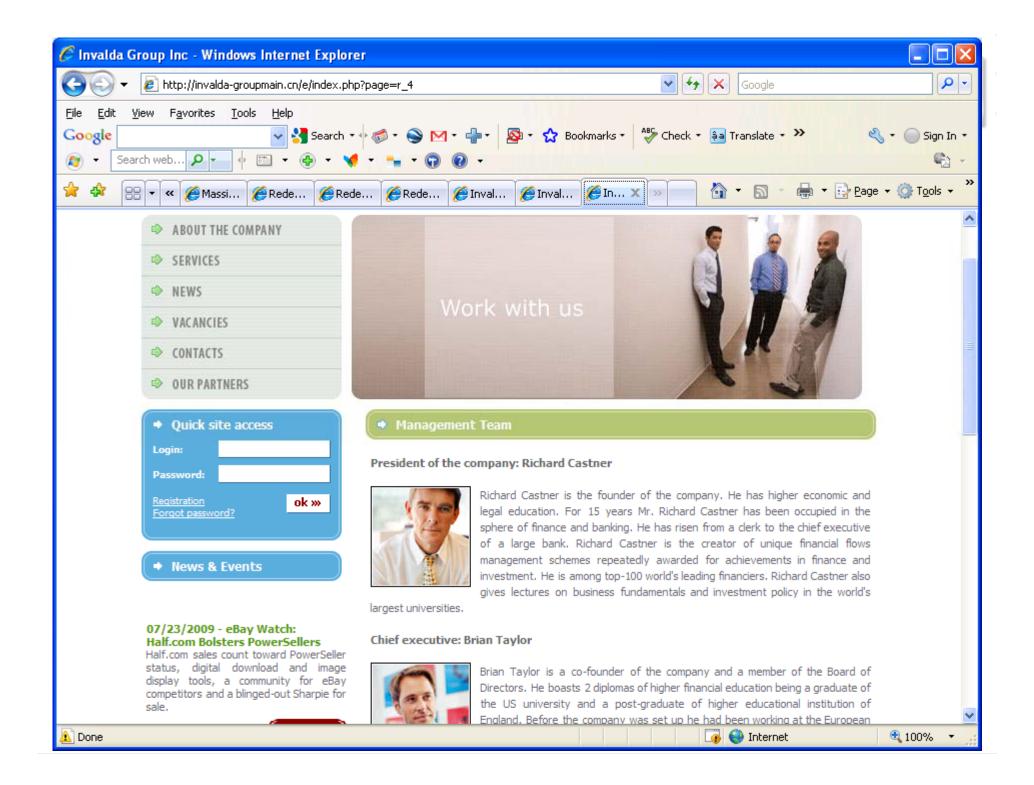


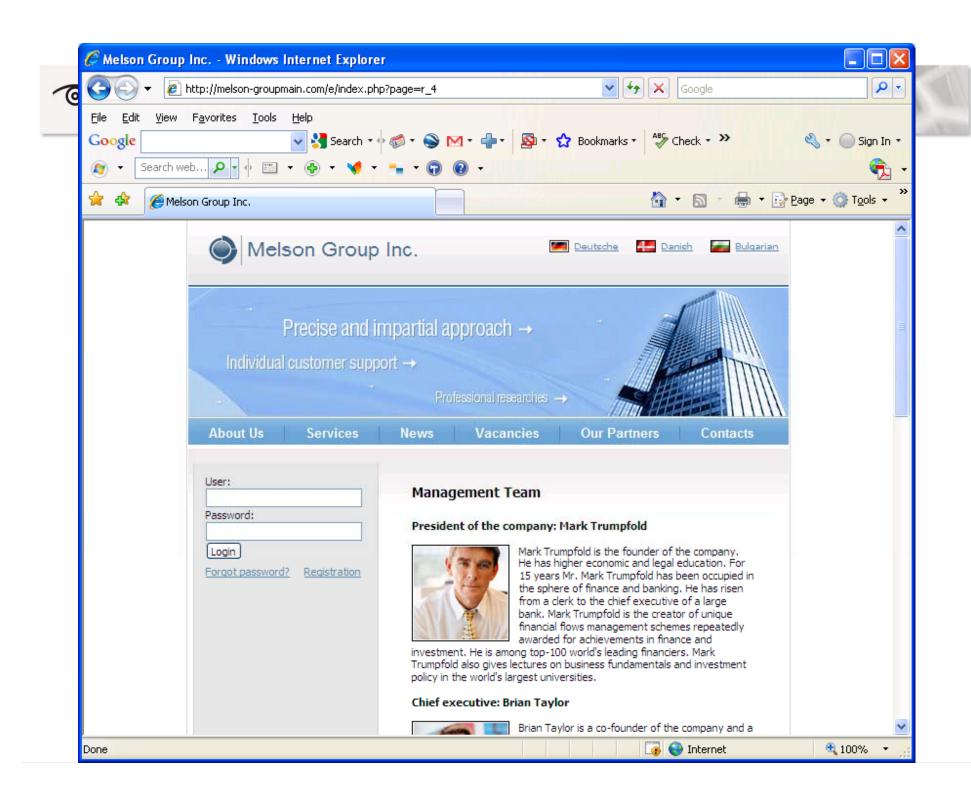


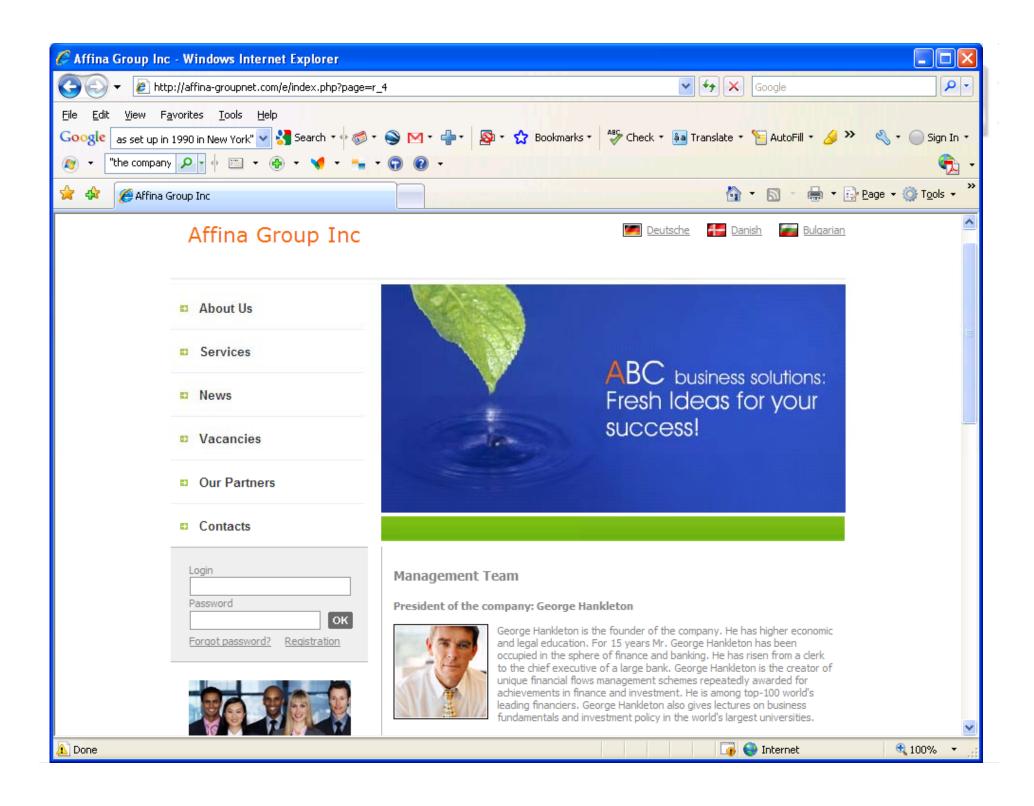




















## Collective Intelligence Gateway Data:

Seemingly innocuous data that can be combined with other data across time, a company, or a group to reveal something sensitive.











# Some Potential Direct Disclosures

- Information about customers > or sales
- Information about the health of a company
- New policies or policy changes
- Ethics issues internally
- Hiring or firing
- Company violated a law

- Disclosure of legally protected data
- Creation of a legally protected "record" in a public place
- Mergers and acquisitions
- Potential strikes
- Trade secrets disclosed
- New features in a product or product changes









Company Name : We're losing customers, so we're reduced to having to screw employees. That's how we roll. Apparently.

10:17 AM Oct 3rd from Twitterrific









## **Telegraphed Information**

- Location services like Loopt append location information
- Job seeking behavior LinkedIn recommendation requests, resume distribution, etc.
- Linkages/Relationships new contacts or friends added to social networks









# Flying to bentonville arkansas for a quick trip and meetings straight through the day friday.

7:39 PM Aug 20th from TinyTwitter









Holiday Ro-o-o-o-o-o-o-o-oad, Holiday Ro-o-o-o-o-oad! in Bentonville, AR http://loopt.us/

2:43 PM Apr 1st from Loopt









#### LinkedIn Recommendations

John Smith is requesting an endorsement for work









### Congratulations! You and Mike are now connected.



#### View Mike's profile to:

- Download Mike's current contact information
- Write a recommendation for Mike
- · Find opportunities through Mike's network
- See who you know in common



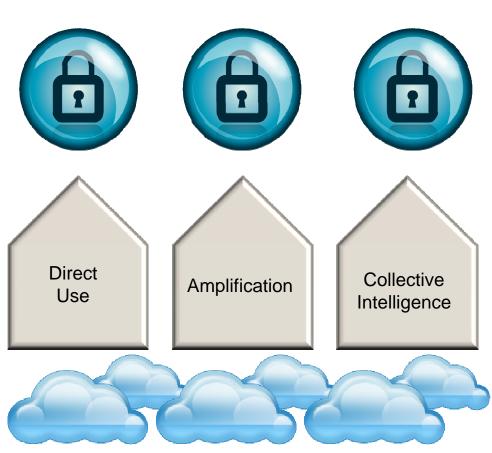






## Summary

- Need to look beyond traditional PII
- Increasing amount of data equivalency
- Creating awareness around *Gateway* Data can help reduce risk



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