

RSA[®]CONFERENCE2014

FEBRUARY 24 – 28 | MOSCONE CENTER | SAN FRANCISCO

Share.
Learn.
Secure.

Capitalizing on
Collective Intelligence

Helping People Walk the Narrow Path

SESSION ID: HUM-W04A

Markus Jakobsson

Zapfraud



What is Liar Buyer?

Resolution Center

Please review the details of transaction and indicate the reason for dispute.

Transaction Information

Transaction ID: **8b65-0983**

Seller Name: **eBay Inc.**

Transaction Amount: **-\$549.99 USD**

Item: **3D WiFi Smart Home Theater System
w Wireless Speakers**

Transaction Date: **Oct. 10, 2013**

Please select an option to continue:

- Request Refund -- I haven't received my item.
- Cancel Dispute -- I do not have a complaint about this item.



Hobby Fraud: Why Traditional Security Fails



- An account with a history ...
- ... matching IP address ...
- ... recognized computer ...
- ... the correct password ...
- ... no signs of malware ...

Suppressing Liar Buyer

Resolution Center

Please review the details of transaction and indicate the reason for dispute.

Transaction Information

Transaction ID: **8b65-0983**
Seller Name: **eBay Inc.**
Transaction Amount: **-\$549.99 USD**
Item: **3D WiFi Smart Home Theater System
w Wireless Speakers**
Transaction Date: **Oct. 10, 2013**

Please select an option to continue:

- Request Refund -- I haven't received my item.
- Cancel Dispute -- I do not have a complaint about this item.



Resolution Center

Please review the details of transaction and indicate the reason for dispute.

Transaction Information

Transaction ID: **8b65-0983**
Seller Name: **eBay Inc.**
Transaction Amount: **-\$549.99 USD**
Item: **3D WiFi Smart Home Theater System
w Wireless Speakers**
Transaction Date: **11:19:00 Jan 2, 2013**

Transaction is done from device with IP: **68.193.90.66**

Transaction is done from this location: **Staten Island, NY**

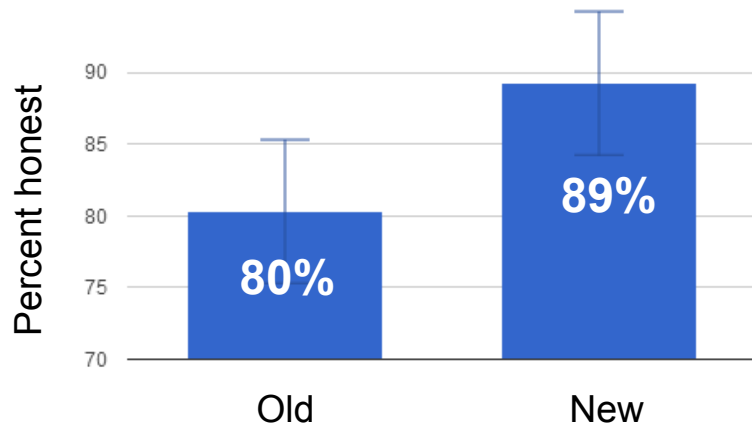
 **Recognized Computer (test)**



Please select an option to continue:

- Request Refund -- I haven't received my item.
- Cancel Dispute -- I do not have a complaint about this item.

Suppressing Liar Buyer



Resolution Center

Please review the details of transaction and indicate the reason for dispute.

Transaction Information

Transaction ID: 8b65-0983
Seller Name: eBay Inc.
Transaction Amount: -\$549.99 USD
Item: 3D WIFI Smart Home Theater System
w Wireless Speakers
Transaction Date: 11:19:00 Jan 2, 2013

Transaction is done from device with IP: 68.193.90.66

Transaction is done from this location: Staten Island, NY

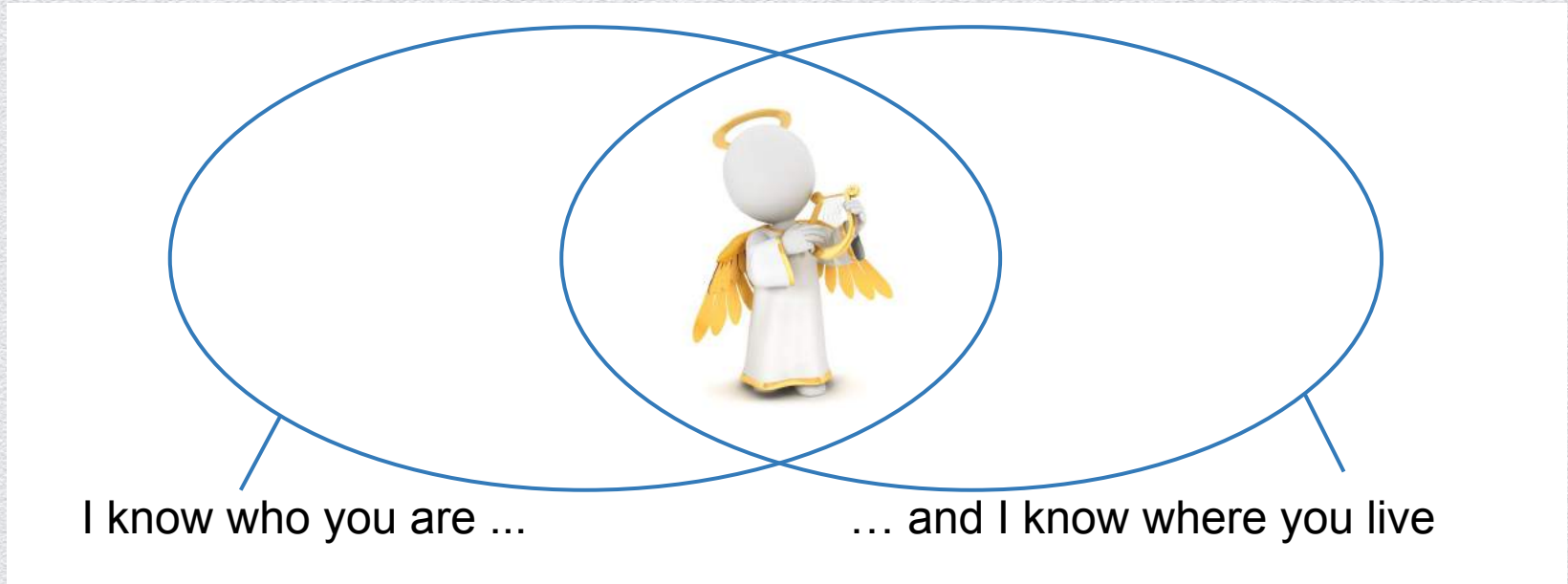
 **Recognized Computer (test)**



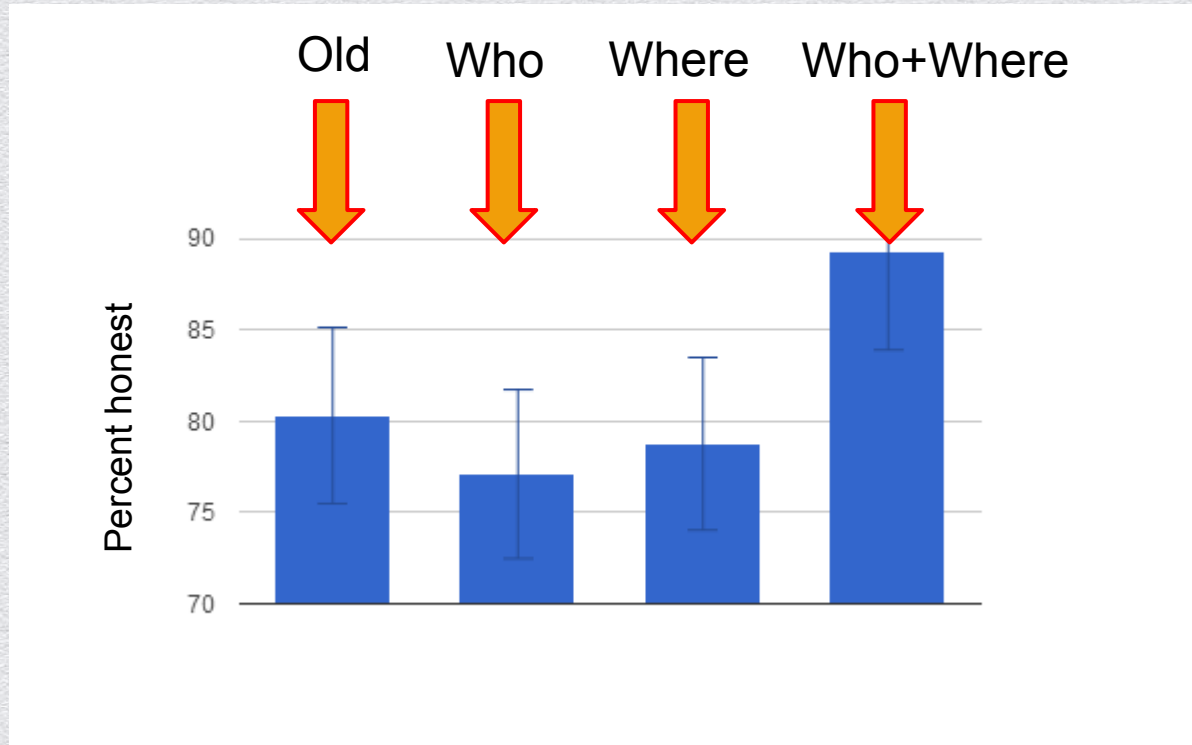
Please select an option to continue:

- Request Refund -- I haven't received my item.
- Cancel Dispute -- I do not have a complaint about this item.

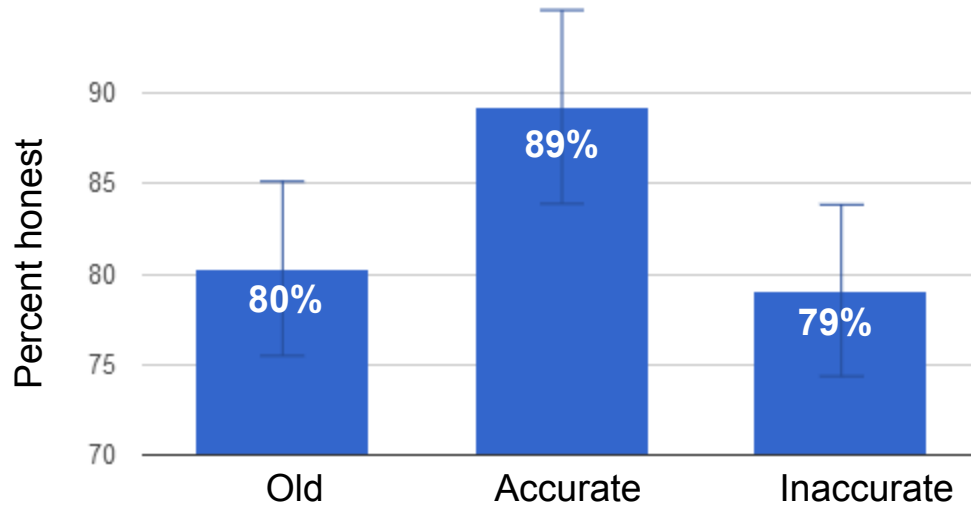
Encouraging honesty ... all it takes is *knowing*



I know who you are ... and I know where you live!



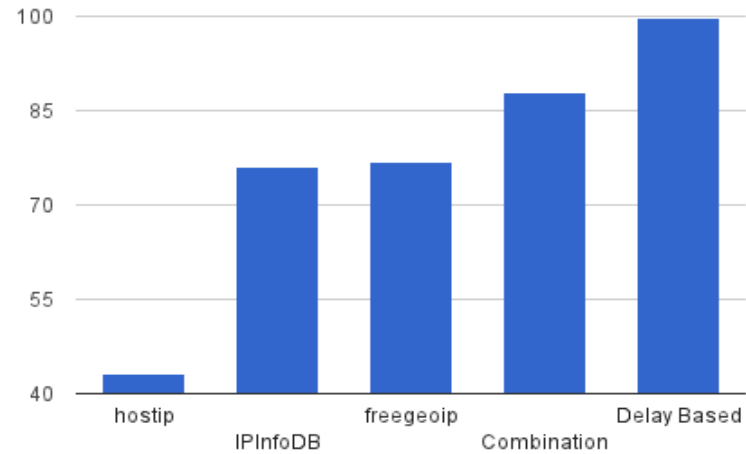
What if the map is not accurate?



How often is the location “good enough”?



Geolocation Accuracy



We have a *psychological* countermeasure

- ◆ Addresses *hobby fraud*, not professional fraud.
- ◆ Hobby fraud and professional fraud must be dealt with separately.
- ◆ Requires an understanding of *people* to develop and tune.
- ◆ Related techniques for other hobby fraud - such as friendly fraud.

RSACONFERENCE2014

FEBRUARY 24 – 28 | MOSCONE CENTER | SAN FRANCISCO



Helping People Walk the Narrow Path

Markus Jakobsson

Joint work with

Hossein Siadati (NYU Poly)

Mayank Dhiman (UCSD)