

LIS-3353

Privacy

We have technical privacy

(if we're careful)

(really, really careful)

Legal “privacy”

No explicit right to privacy in the Constitution
–but..

1st, 4th, 5th, amendment, and others

Two big legal cases

Kyllo v. U.S.

- (Thermal imaging case)

Katz v. U.S

- (Wiretapping)

Pre-Internet!

Traditional (misconceptions of) privacy

The one deep dark secret that you would be mortified if the world knew....?

The P.I.s best friend



Specifically...

YOUR RECEIPT
THANK YOU
CALL AGAIN

REG 10-10-2007 13:25
FERNANDO MC #01 000036

1 BEER	•5.00
1 CALAMARI	•6.00
1 CRAB SOUP	•5.00
1 TOP SIRLOIN	•11.00
1 BOILED CRAB	•23.00
TOTAL	•50.00
CASH	•50.00

Even better (for them)



Not much wrong here, right?

Can a store legally record your purchasing?

- (sure, why not?)

Why might they?

- Inventory
- Advertising, etc

Legal protection/acknowledgment:

TRADE SECRET

Suddenly, online!



amazon.com[®]

But, maybe you **don't** keep it a
trade secret..after all:

If CVS sees: Pregnancy tests

..then that's interesting, kind of.

If Amazon ALSO sees: “What to expect when you're expecting”

...perhaps valuable info for CVS? Vice-versa?

And again, all legal: Gathered legally, traded or sold legally – little, marginal steps.

Don't forget

...the security cameras

..the bank records

..the credit scores

..the phone records

AND THIS IS ONLY WHAT WAS GIVEN UP
“ON ACCIDENT...”

Info brokers:

- Choicepoint
- Acxiom ,etc.

Then, there's the VOLUNTARY side

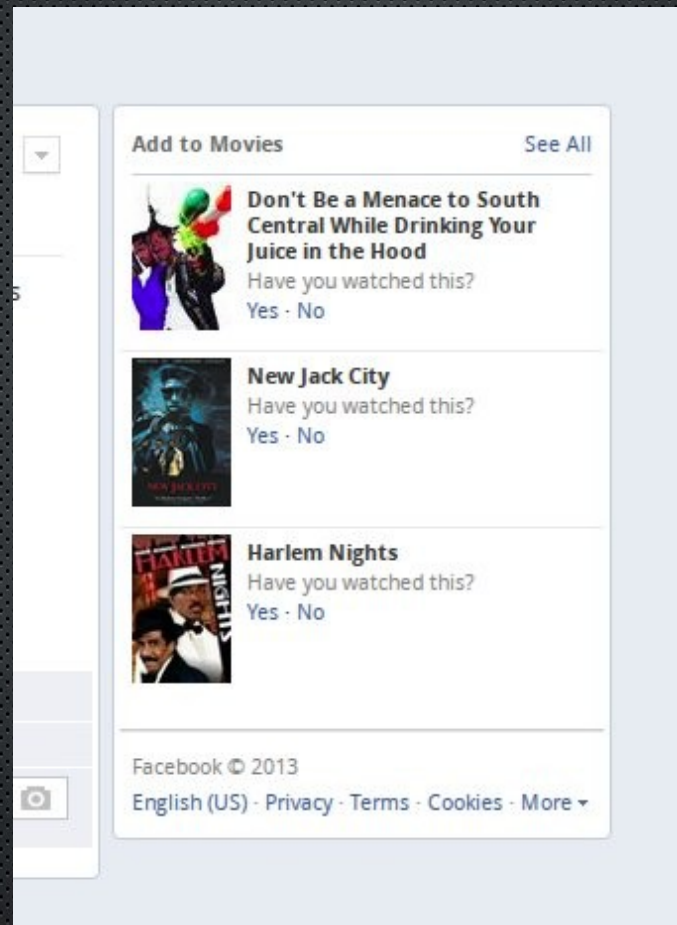
Facebook, et al

...but you guys know all about this, right?

“but hey, it's just advertising”

Inference: Figuring out things about people

True story: the first time Facebook asked me about my movies...



Inference

Credit scores

“Google Killed Me”

Target and pregnancy

And Graph Search...(wow, they're really that oblivious?)

If companies can sell, who's buying

Other companies? Yep?

Law enforcement? Yep.

(but what about the 4th amendment?)

Interesting question:

- Why should the gov't / law enforcement directly surveil AT ALL?

This allows you to get around them pesky Constitutional rules...

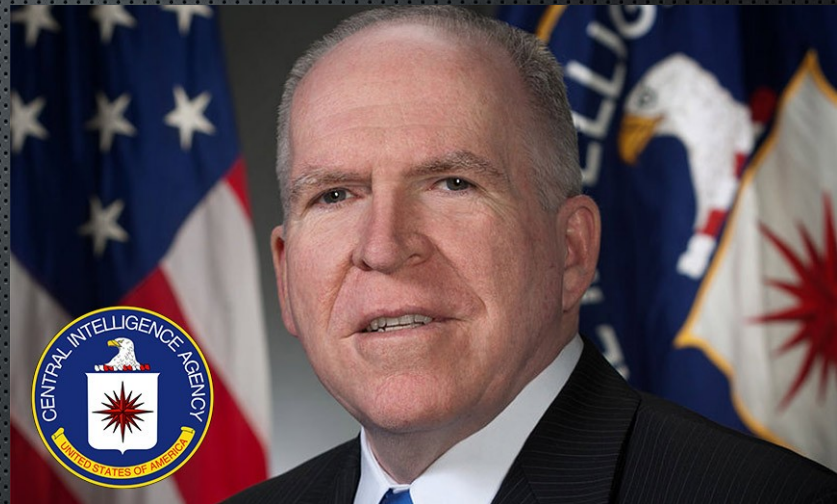
But, as we know, they did.
(he wasn't the first...)



NSA: PRISM (among others)

- Roughly: everything.
- “Collect it all now, perhaps analyze later”

Do they even understand this stuff?



Justification: Terrorism?

Perhaps, but not a great strategy.

Why an “automatic terrorism detector” will pretty much never work...

The False Positive Paradox (Gatorbola!)

New disease; Unspeakable consequences.

Incidence rate: 1/10,000 people have it

Yikes!

But, there's a 99% accurate test!

Specifically:

99% meaning **1% false positive rate**

(lets say 100% accurate for tests that come out negative...)

But...uh-oh: you get tested and...

The test is positive!

What are the odds that you have **Gatorbola**?

Do the math:

99% right = 1% wrong.

So, if you test 10,000 people:

100 out of 10,000 people will have a + test

But..

1 out of 10,000 people will actually HAVE it.

Whoa, what?

Even for a test that's 99% accurate, there's still only a 1/100 chance that you have it.

Now, consider a “terrorism” test? e.g.

How many terrorists are there? And

How accurate could a terrorism test possibly be?

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Privacy II, the problems

Why NOT surveil? (in this way)

What exactly is wrong with ubiquitous surveillance?

AKA, the “What do you have to hide” question.

Silver Linings?

The end of shame?

If everybody knows everybody's business, can this reduce shame/embarrassment?

Little Brother

As opposed to “Big Brother”

Yes, cameras are everywhere – but “we” control quite a few of them.

Perhaps that's a good question to turn around

“Does the NSA collect any type of data at all on millions or hundreds of millions of Americans?”

“No sir ... not wittingly.” – James Clapper

The question of “Cybersecurity”

Important issue, but, what's the threat?

Malicious Hackers

vs.

The Corporations

(who may not have your best interests in mind)

Or worse; both:

Malicious hackers aided by the bad decisions
of Corporations

- e.g. password leaks or deliberate backdoors

The Role of “Mobile”

Attach a device to your child that tracks nearly everything she does, and sends most of that information to a third party who won't give you access to most of it.

Collusion:

All the big companies are doing it to some extent, but some are at least appearing to try to fight it.

The “Cloud”

The “Cloud”

Academically, meaningless:

Substitute either

1) The Internet (most common)

2) An Intranet

3) A Physical Server

And you have a more accurate term.

The “Cloud”

Why the popularity?

The “Cloud”

Why the popularity?

One theory – not because something new was happening for end-users...

After all, we had email and picture storage and file storage (XDrive)

The Cloud

But there was new technology on the B2B front.

Pre-“Cloud” – all servers were “physical”

Post-“Cloud” – servers could be virtualized.

“Apps” in your browser... (why?)

Saas

“Software as a Service”

Redefining Terms (frequently courtesy of RMS)

“Software as a Service”?

v.

“Service as a Software Substitute”

What NEEDS to be centralized?

What NEEDS to be centralized?

Search. (Google, et al)

What else?

(re: things you and I use, I literally cannot think of anything else, can you?)

What NEEDS to be centralized?

- Facebook? Nope
- Twitter? Nope
- Google Docs? Nope
- Dropbox?

(I literally can't think of any more of them that **must** be centralized)

Almost final thought:

“I'm not too worried about privacy because I have nothing to hide...”

Almost final thought:

“I'm not too worried about free speech because I have nothing to say...”