



Privacy and Mobile Payments

Prof. Paul Schwartz

Privacy Law Forum

Palo Alto

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What are mobile payments?

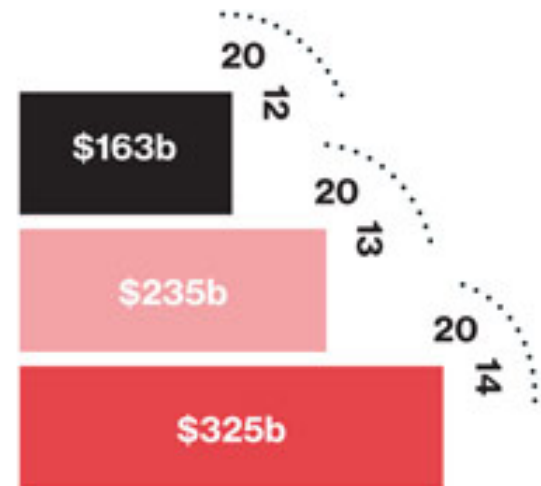


Easy Mobile Payments Are Almost Here

By Brad Stone and Olga Kharif | November 14, 2013

It's noon at the crowded Steins Beer Garden in Mountain View, Calif., and executives from eBay's (EBAY) PayPal are discussing the future of the massive market for retail and restaurant payments with a reporter who's paying for lunch. Without ever opening his wallet, the reporter enters a four-digit number printed at the bottom of the check into a PayPal app on his smartphone. An itemized bill for three smoked chicken salads, a tomato bisque, and two Diet Cokes appears on the screen. One click later, without ever needing to flag down a waiter, the check is paid.

Worldwide mobile payments are growing by about 40 percent a year







Mobile payments
market:
2012: \$12.8 billion
2017: \$90 billion

Source: Forrester Research
<http://bit.ly/mpmarket>

Mobile Payments Survey (2012)

MOBILE PAYMENTS:
CONSUMER BENEFITS &
NEW PRIVACY CONCERNS

Chris Jay Hoofnagle
Jennifer M. Urban
Su Li



- Many benefits of mobile payments technology including “potential for better payment security”
- But “mobile payment technologies offer the ability to collect more information than before, and share it with different participants in transaction”
- More detailed dossiers about consumer purchase behavior

FTC Staff Report, Mobile Payments (March 2013)



- Noting need for “privacy by design”: “companies to consider and address privacy at every stage of product development”
- Companies should develop ways to provide transparency about data practices in mobile payments context
- Need “to increase data security as sensitive financial information moves through the payment channel”



Ex-NSA Official Inglis Warns Tech Firms: Be Transparent

Companies That Amass Vast Amounts of Personal Data Should Learn From Agency's Mistakes, He Says

By **DANNY YADRON**

March 5, 2014 8:51 p.m. ET

SAN FRANCISCO—To a degree shared by few, John C. Inglis knows the risks of collecting a lot of data on people.

Until January, Mr. Inglis, who goes by "Chris," was the number-two official at the [National Security Agency](#). He spent much of 2013 pushing back against disclosures from former contractor [Edward Snowden](#) about the extent of NSA surveillance.

Now the former NSA deputy director is warning tech firms to be more transparent.

Framework for mobile payment companies re: government

- Overall legal structure mandates government gets information about transactions
- Bank Secrecy Act (1970)
- FinCen

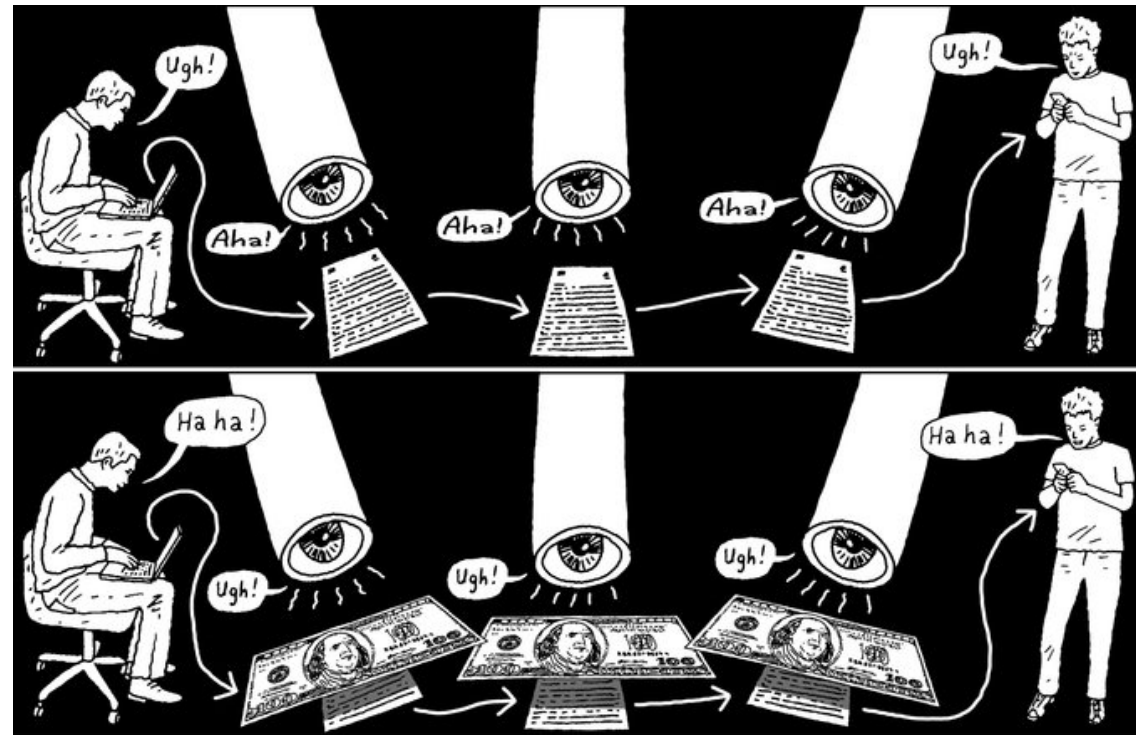


Has Privacy Become a Luxury Good?

By JULIA ANGWIN MARCH 3, 2014

LAST year, I spent more than \$2,200 and countless hours trying to protect my privacy.

Some of the items I bought — a \$230 service that encrypted my data in the Internet cloud; a \$35 privacy filter to shield my laptop screen from coffee-shop voyeurs; and a \$420 subscription to a portable Internet service to bypass untrusted connections — protect me from criminals and hackers. Other products, like a \$5-a-month service that provides me with disposable email addresses and phone numbers, protect me against the legal (but, to me, unfair) mining and sale of my personal data.





Song-Beverly Credit Card Act (1971)

- Restricts businesses from requesting that cardholders provide “personal identification information” during credit card transactions and then recording that information
- How does mobile payment info fit in?
- How about GPS info that shows person asking for credit is in store in question?





Security Issues for Mobile Payments



Data Breach Hurts Profit at Target

By ELIZABETH A. HARRIS FEB. 26, 2014

The widespread theft of Target customer data had a significant impact on the company's profit, which fell more than 40 percent in the fourth quarter, the retailer reported on Wednesday.

The company said net earnings were \$520 million in the quarter, down 46 percent from the same period a year earlier, when earnings were \$961 million. Earnings per share were 81 cents, down from \$1.47 the year before. Target executives repeatedly called 2013 a "challenging" year on Wednesday.

"Results softened meaningfully following our December announcement of a data breach," Gregg W. Steinhafel, Target's chief executive, said in a statement.





Security Issues for Mobile Payments



- Smartphone is a small device—vulnerable to theft and loss
- Smartphone likely to have sensitive information on it
- Malware
- Vulnerabilities in OS
- Vulnerabilities in Apps
- Weakness in wireless security
- Other issues?