

# DIGITAL FOOTPRINTS AND VULNERABILITIES: THE EVOLUTION OF PRIVACY IN THE INTERNET AGE



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# THE MESSAGE



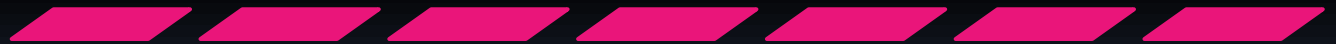
# 1. THE CONCEPT



# 2. THE REALITY



# 3. DILEMMAS and SOLUTIONS





# THE CONCEPT OF PRIVACY

ACHIEVING COMMON GROUND



# What is privacy?

- “...the claim of individuals, groups, or institutions to determine for themselves when, how and to what extent information about them is communicated to others..”



# Core themes

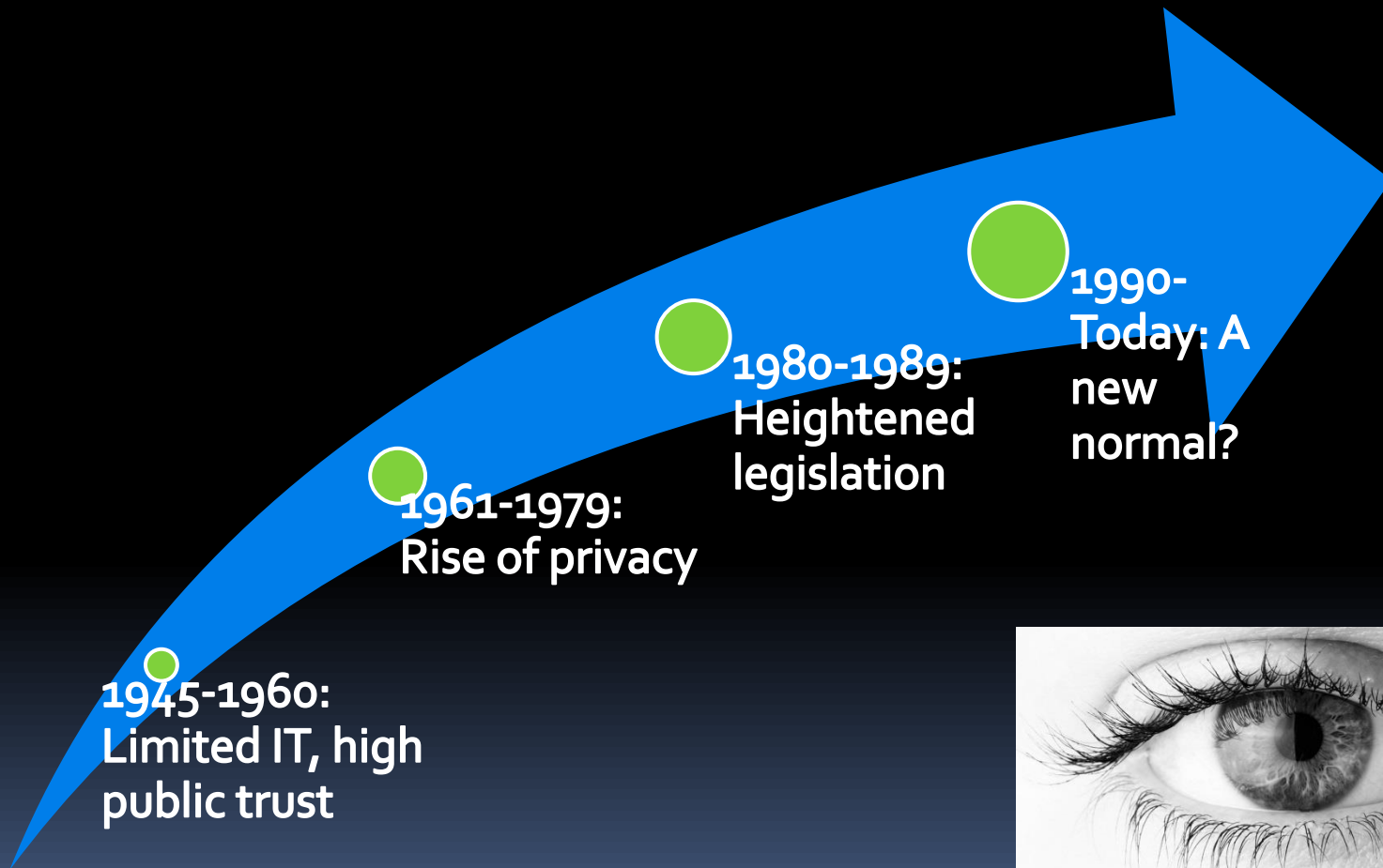
....the individual's ability to control the circulation of information relating to him."

.....rather it is the control we have over information about ourselves."

....to have personal privacy is to have the ability to consent to the dissemination of personal information."



# The privacy journey in the US



# Framing the privacy narrative

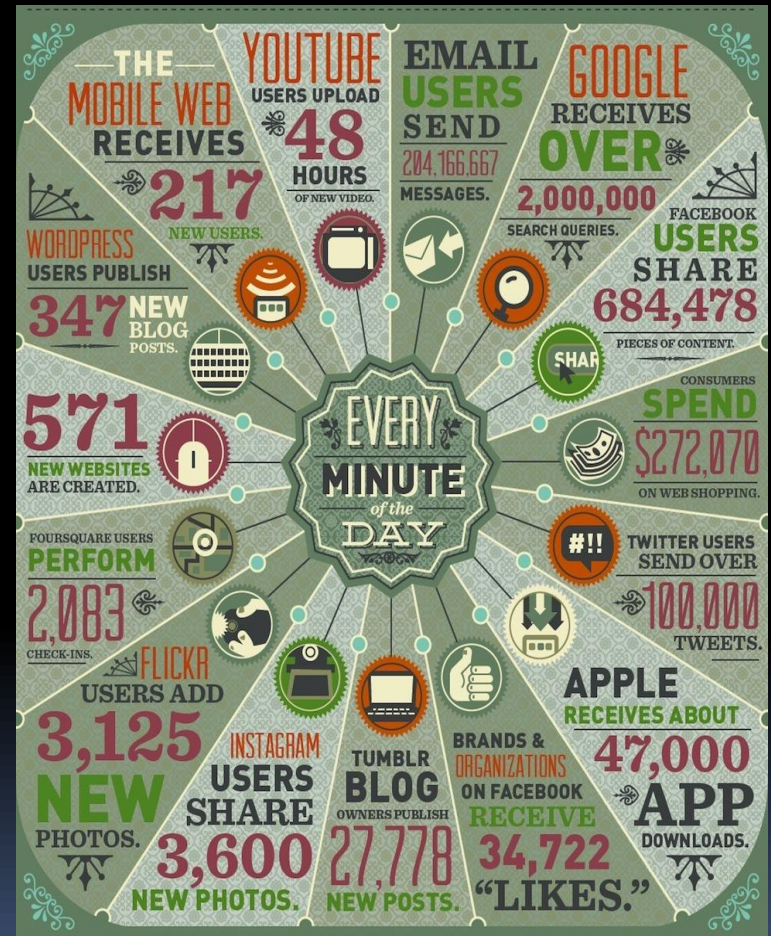




# The ubiquity of digital footprints

2.1 billion connected people

- VOLUME
- VELOCITY
- VARIETY
- VERACITY



# The art of the “possible”

It will soon be technologically feasible to access our financial, medical, social and personal histories and identities (constrained only by legal restraints)

Does it matter if Google has our information?  
Does it matter if the government does?





They're Watching You at Work  
What happens when Big Data meets human resources? The emerging practice of "people analytics" is already transforming how employers hire, fire, and promote.

## Every Step You Take

As cameras become ubiquitous and able to identify people, more safeguards on privacy will be needed





# The Reality

PRIVACY AND SOCIETY TODAY

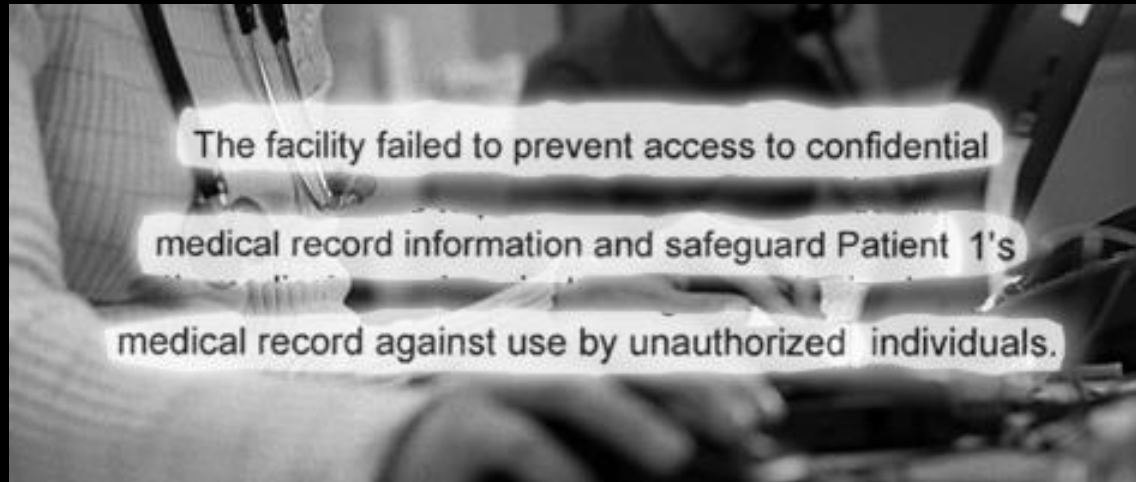


# How did you know where I am?

- Jesper Anderson and “check-in” pictures
- Million check-ins in 2 weeks
- Individual location (home, shopping, picking up the kids..)
- Workaround on privacy settings



# How did you know that?



- Confidential health information of “celebrity” patients

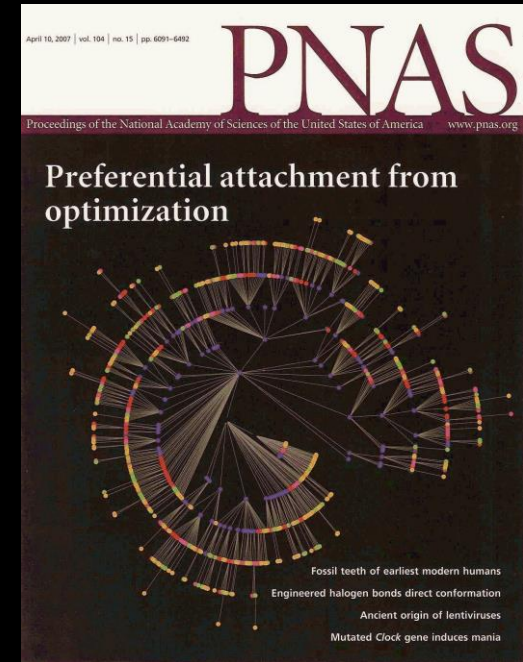
# What did I do wrong?

- Lindsey Stone at Arlington National Cemetery



# I am now you

- Reconstruction of social security numbers using statistical techniques



Memphis, Tennessee  
July 15, 1962



102-55-4433



# Online faux pas

Would you want to go to a college that stalks you online?



When did it become wrong to be young and foolish?

And of course....

**The whistleblower**

I can't allow the US government to destroy privacy and basic liberties

**the guardian**  
guardian.co.uk

... America is that nothing will change



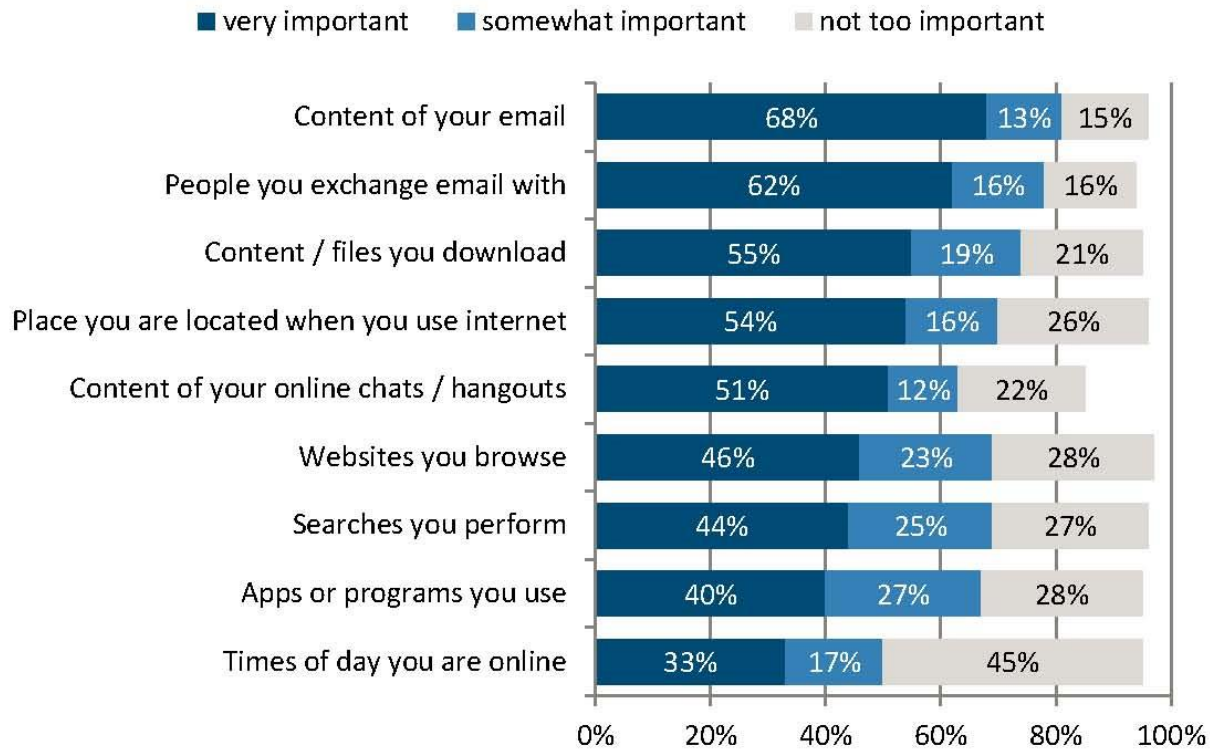
# The paradox

We continually claim to want and value privacy, but we often act to compromise it

# The paradox: what we say

## How much do you care that only you and those you authorize should have access to this information?

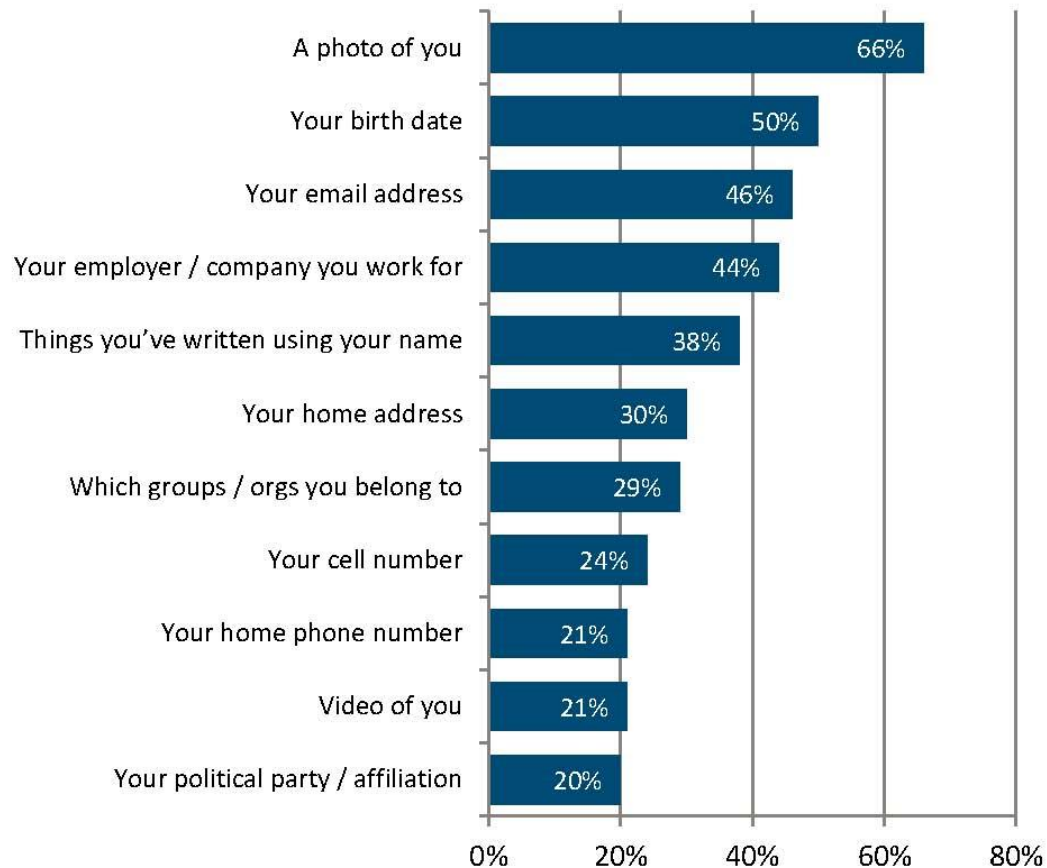
*% of adult internet users who say it is important—or not—to them to control these types of information*



# Revealing ourselves online

## Personal information online

*% of adult internet users who say this information about them is available online*



# Do we *really* value privacy?

Framing and priming effects

Emotions and health

Irrationality in privacy decisions

The illusion of perceived control



Inconsistent valuations

Disclosure and trust



# To summarize

- Privacy breaches have significant consequences
- Individuals are “irrational” consumers of privacy
- “Disclosure” is complex and contingent
- Technology and privacy co-evolve







# Dilemmas and Solutions

IMPERATIVES FOR GOVERNMENT AND BUSINESS

# Governments

Is eternal vigilance the price of freedom?  
The absence of market forces

## BALANCE

- The “national” interest with individual liberty and political freedom
- The risks and benefits of regulation

## TRUST

- Reassure citizens of competence, integrity and benevolence
- Design institutions to curate and manage data

## LEGISLATION

- The “phase” mismatch challenge: leading, not lagging
- Is GDPR the right solution?
- Is a Consumer Privacy Bill of Rights the right solution?

# What societies stand to lose

*What kind of people would we be if deprived of our privacy?*



*If people will forever be held responsible for their past actions, then perhaps they will be more careful about how they behave.*

*Equally, this will impede the willingness to talk risks*

*How do we collect data to enable the progress of scientific breakthroughs?*

# Business

## INFORM

- Transparent and comprehensible privacy policy
- Place users in control over privacy settings: opt-out as the default

## PROTECT

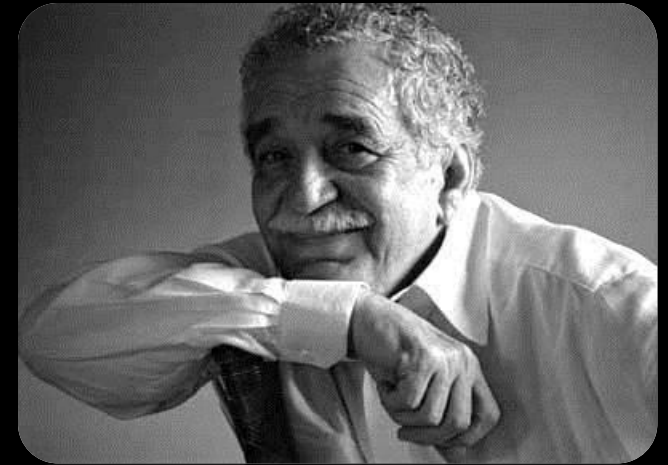
- A pervasive culture of security
- Privacy protective technologies and privacy by design

## OFFER A QUID PRO QUO

- Acknowledge the calculus
- Tailor incentives to context and individual characteristics

“All human beings have three lives: public, private, and secret.”

Gabriel García Márquez, *Gabriel García Márquez: a Life*



"Is the human right to privacy still protected in our digital world? And should everything that is technologically feasible, be allowed?"

Peter Wittig, *Permanent Representative to the UN*

