

**eic**  
**2018**  
12<sup>TH</sup> EUROPEAN  
IDENTITY  
& CLOUD  
CONFERENCE

# The Laws of Identity on the Blockchain

KIM CAMERON

ARCHITECT OF IDENTITY

MICROSOFT CORPORATION





Enter the Realm  
for magical  
experiences





Name

Home Address

Email Address

Date of Birth

Username

Password





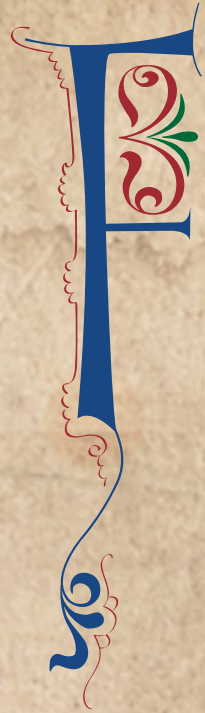


The Castles of the  
Lords can protect  
the People.



D. JENITT





Follow the Laws of Identity and  
the Realm will prosper! ⑨







**I.** User control  
and consent

**II.** Minimal  
disclosure for a  
constrained use

**III.** Justifiable  
parties

**IV.** Directed identity

**V.** Pluralism of  
operators and  
technologies

**VI.** Human  
integration

**VII.** Consistent  
experience  
across contexts



The Realm seems a land of wondrous treasures.



We thank thee for thy purchase of two geese!







Alas, unexpected peril  
and treachery await!





Phishing

Data overcollection

Pharming

Breaches

Cookies

Sales of data

Data sharing

User tracking



# We are spied upon!

- I. User control and consent
- II. Minimal disclosure for a constrained use
- III. Justifiable parties
- IV. Directed identity
- V. Pluralism of operators and technologies
- VI. Human integration
- VII. Consistent experience across contexts

## The New York Times

Edward Snowden Says Disclosures Bolstered Individual Security



<https://www.nytimes.com/2016/09/17/world/europe/edward-snowden-defending-his-patriotism-says-disclosures-helped-privacy.html>



# Thieves prey upon our friends!

- I. User control and consent
- II. Minimal disclosure for a constrained use
- III. Justifiable parties
- IV. Directed identity
- V. Pluralism of operators and technologies
- VI. Human integration
- VII. Consistent experience across contexts



Facebook says Cambridge Analytica had data on 87 million people



<https://www.cnet.com/news/facebook-says-cambridge-analytica-had-data-on-87m-people/>

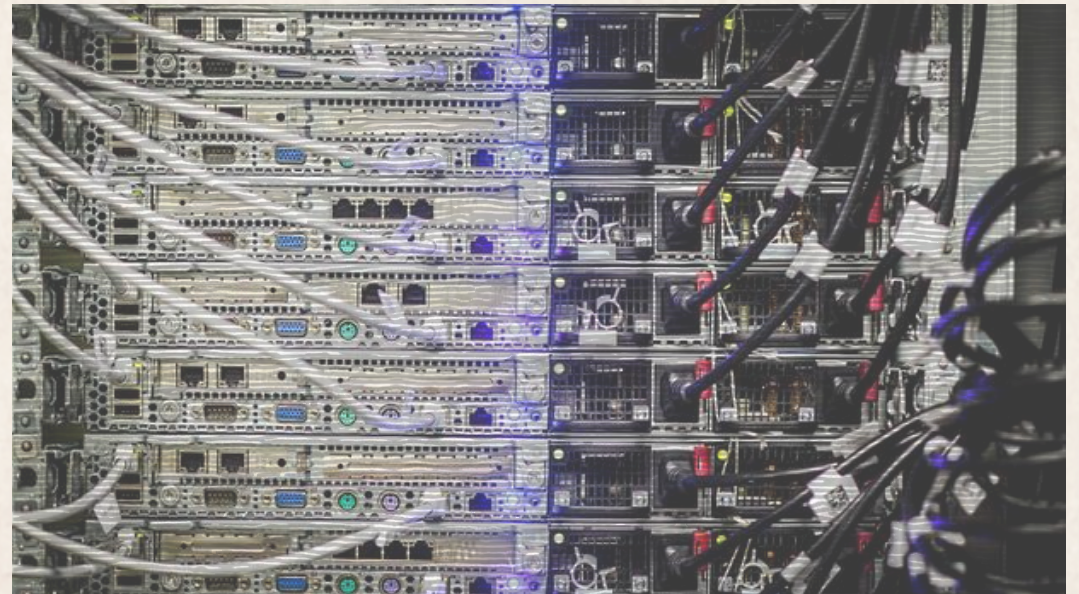


# Foreign invaders plunder our identities!

- I. User control and consent
- II. Minimal disclosure for a constrained use
- III. Justifiable parties
- IV. Directed identity
- V. Pluralism of operators and technologies
- VI. Human integration
- VII. Consistent experience across contexts

## theguardian

OPM Hack: China blamed for massive breach of US government data



<https://www.theguardian.com/technology/2015/jun/04/us-government-massive-data-breach-employee-records-security-clearances>



- I. User control and consent
- II. Minimal disclosure for a constrained use
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Without the Laws the Castles crumble!



The Crier sounds  
the alarm.



# THE WALL STREET JOURNAL.

Your Apps Are Watching You



<https://www.wsj.com/articles/SB10001424052748704694004576020083703574602>



The Crier sounds  
the alarm.



**The Register**

Reg probe bombshell: How we  
**HACKED** mobile voicemail  
without a PIN



[http://www.theregister.co.uk/2014/04/24/voicemail\\_still\\_easy\\_to\\_hack/](http://www.theregister.co.uk/2014/04/24/voicemail_still_easy_to_hack/)



The Crier sounds  
the alarm.



Online privacy fears are real  
More people are tracking you than you think

**Invasion of privacy**  
*THE NET'S THREAT TO YOU*

- PART 1**
  - REAL ONLINE PRIVACY FEARS
  - A SECURITY EXPERT'S TIPS
  - SOFTWARE SOLUTIONS
- PART 2**
  - BIG BOSS IS WATCHING YOU
- PART 3**
  - CONGRESS TACKLES PRIVACY ISSUES

**INTERACTIVES**

- PROTECTING YOUR PRIVACY
- TOP 10 WAYS E-MAIL GETS INTERCEPTED

Christine Cox / MSNBC Illustration

<http://www.nbcnews.com/id/3078835/t/online-privacy-fears-are-real/#.WvliP0xFyFB>





M. BOWLEY ©

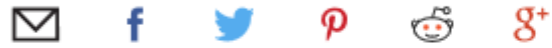
#HandsOffMyData! #PrivacyNow! #SecureOurStuff!



# Texas sues Sony BMG over spyware in CDs

Texas sues Sony BMG over spyware cloaked in CDs  
Attorney general says the tracking technology can pose risks for PCs

POLLY ROSS HUGHES, Copyright 2005 Houston Chronicle Austin Bureau Published 6:30 am, Tuesday, November 22, 2005



This shall not stand!



# AOL Subscribers Sue Company Over Leak of Search Records

Published September 26, 2006 · Associated Press



NEW YORK – Three AOL subscribers who allegedly had records of their Internet searches widely distributed online are suing the company under [privacy laws](#) and are seeking an end to its retention of search-related data.

The lawsuit is believed to be the first to challenge AOL's internal use of some 19 million [search requests](#) made by users. AOL has more than 650,000 subscribers, including the three plaintiffs: two unnamed and Kasadore Ramkissoon of Richmond, N.Y. [which is a borough of New York City].

Filed Friday in U.S. District Court in Oakland, Calif., the lawsuit seeks injunctive relief and other action status. It does not specify the amount of damages sought.



This shall not stand!



# Lower Merion School District Settles Webcam Spying Lawsuits For \$610,000

PHILADELPHIA (AP) — A Philadelphia-area school district has agreed to pay \$610,000 to settle two lawsuits over secret photos taken on school-issued laptops.

The Lower Merion School District admits it used webcams to take webcam photographs and screen shots from student laptops in a misguided effort to locate missing computers.

Lower Merion High School student Blake Robinson, 15, charged in an explosive civil rights lawsuit filed in February that the school used its remote technology to spy on him inside his home. Later evidence showed that the school had photographed 400 times in a two-week period. According to his lawyer, Mark Haltzman,



This shall not stand!



# Privacy groups ask FTC to oppose Facebook's policy changes



By [John Ribeiro](#)

Bangalore Correspondent, [IDG News Service](#) |

SEP 4, 2013 11:20 PM PT



This shall not stand!



# Privacy groups blast Google policy change

## They are urging the FTC to claw back profits, saying fines are meaningless to Google

12/20/2016 | ConsumerAffairs |  Google News



By Mark Huffman

Mark Huffman has been a contributor to ConsumerAffairs since 2004. He covers real estate, gas prices and the economy and has reported extensively on negative-option sales. He was previously an Associated Press reporter and editor in Washington, D.C. and a correspondent for Westwood One Radio Networks and Marketwatch. Read Full Bio

[Email Mark Huffman](#)



This shall not stand!



# FTC report warns of privacy risks in cross-device tracking

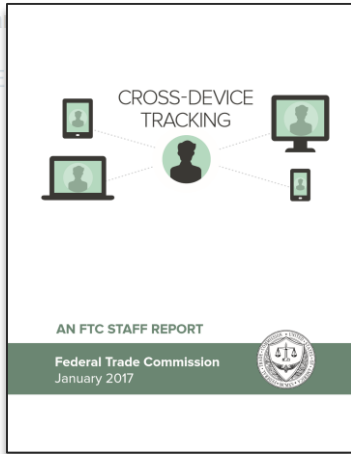
## Consumers should be allowed to opt-out of surveillance that follows them from one device to another

01/24/2017 | ConsumerAffairs | Privacy



By James R. Hood

ConsumerAffairs' founder and former editor, Jim Hood, has worked for Newsday, Hearst, Associated Press Broadcast News, directing coverage of major news events worldwide. He also worked for the United Press International and Zappos, a newswire service for radio and television. Read Full Bio →



M. BOWLEY

This shall not stand!



# The magistrates codify the Laws of Identity.

The EU General Data Protection Regulation (GDPR) is the most important change in data privacy regulation in 20 years - we're here to make sure you're prepared.





# The magistrates codify the Laws of Identity.



**CNN** tech

BUSINESS CULTURE GADGETS FUTURE STARTUP

A global tech earthquake is coming, and the epicenter is thousands of miles from Silicon Valley.

by Ivana Kottasová @ivanakottasova

🕒 April 12, 2018: 8:27 AM ET

The European Union is preparing to enforce a sweeping new data protection law that gives consumers much more control over how their personal details are used. Companies are scrambling to comply.

Regulators say the new rules are necessary to protect consumers in an era of [huge cyberattacks and data leaks](#), highlighted by Facebook's admission that the personal details of millions of its users were abused.

<http://money.cnn.com/2018/04/12/technology/data-protection-europe-gdpr-facebook-tech/index.html>



**B**

alance flows back to  
the realm



D. JENITT



Castles are vulnerable and the risks are great!  
Shall we call upon the people?

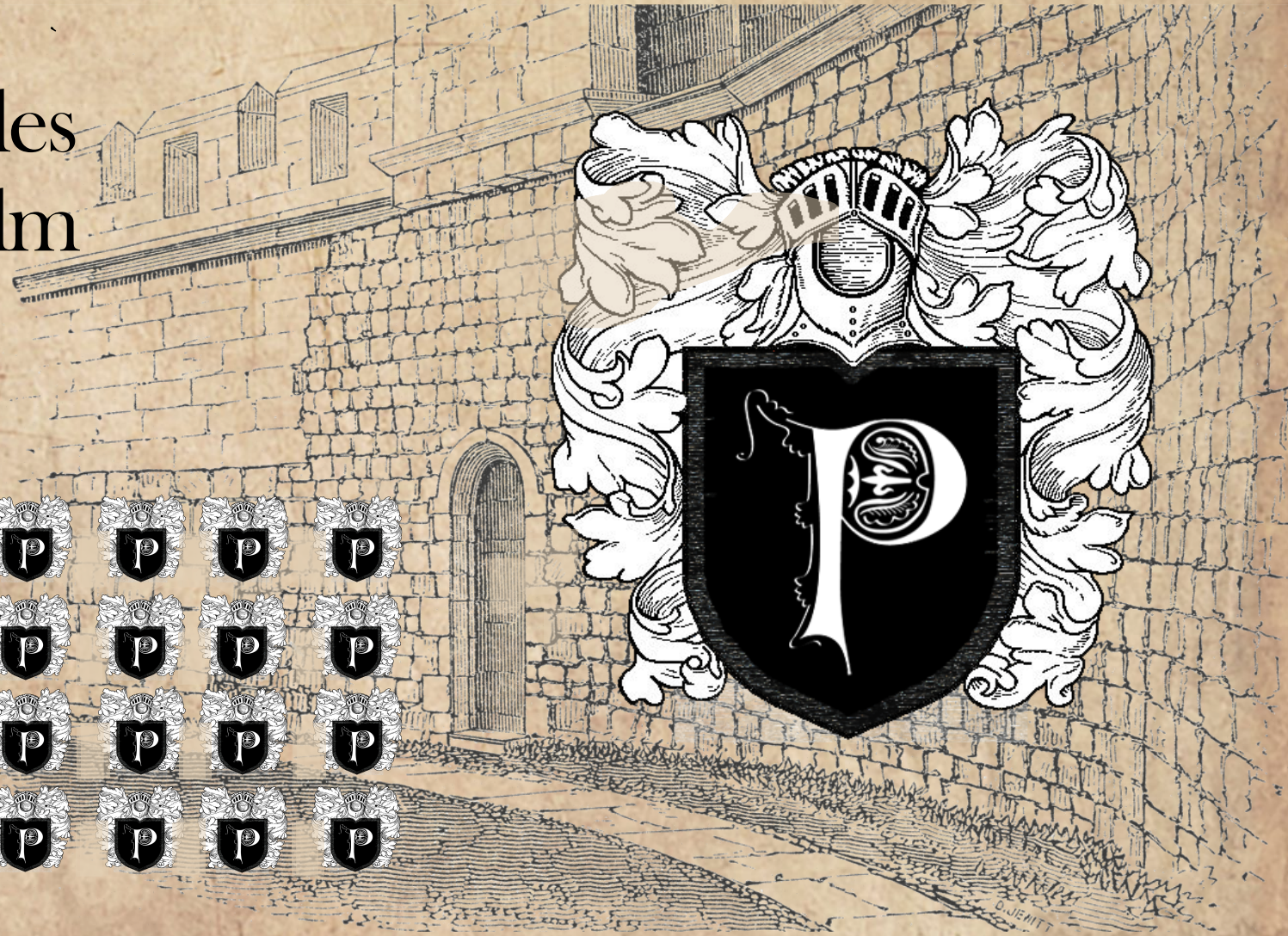


D. JENITT



# If people had personal data shields...

... the people *and* castles  
would protect the realm  
together





# Why a personal shield?



To prove who you are

To test who others are -  
protecting you from liars,  
thieves, impostors

To keep and protect your  
personal data.

To give you control over who  
can see it.

...



# Why a personal shield?



To help people and places  
you like get through to you.

To create a single message  
store for people, companies  
and things.

To connect and order all your  
devices throughout your  
whole life.

To whack the surveillance  
corporation



# How will the shields work?



Web Sites

Personal Apps

DIF Identity Hub Replicas

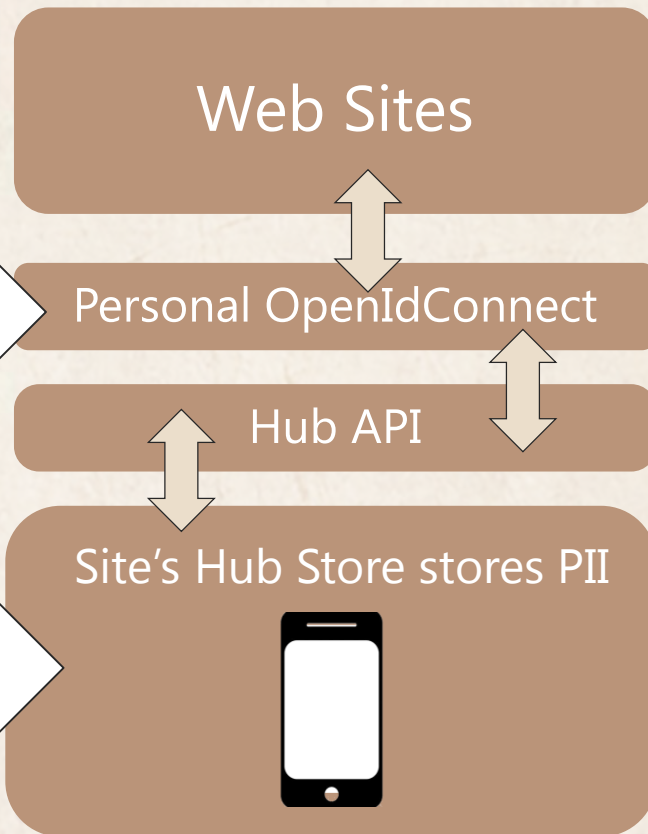




# DID as a social network...

Sites just use OIDC (DID looks like a social network)

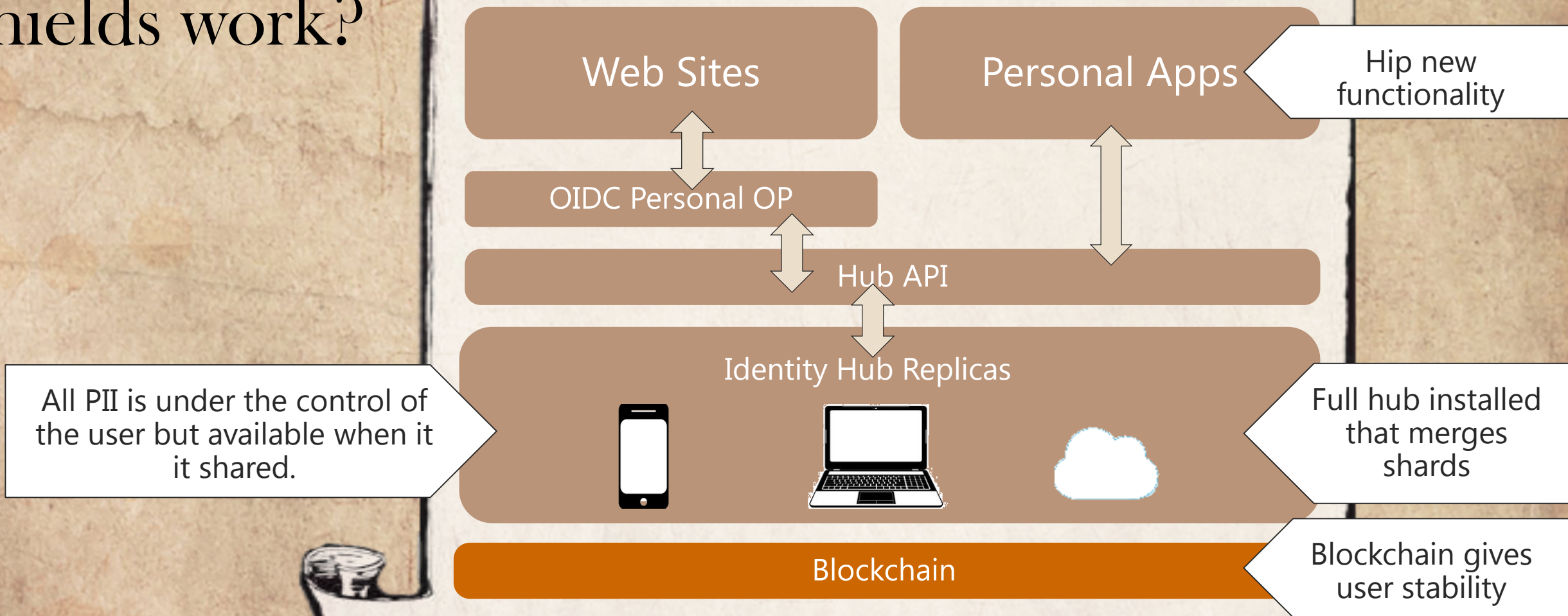
Shard is no-risk because works without any DID adoption



Cool-aid free motion:  
No Risk or dependency



# How will the shields work?





☉☉ The *new & improved* Laws of Identity. ☉☉



**I.** User control and consent

**II.** Minimal disclosure for a constrained use

**III.** Justifiable parties

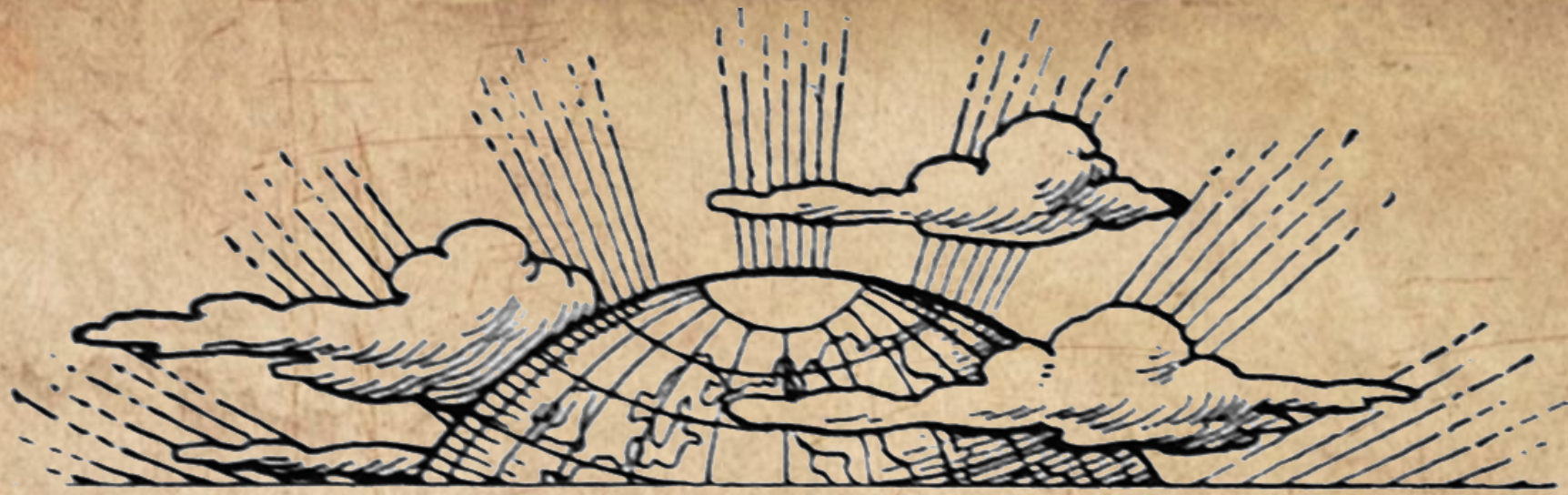
**IV.** Directed identity

**V.** Standardized identity hub working across contexts

**VI.** Standardized DID for long-terms identity stability

**VII.** Human integration





The Journey Continues...

