

Life-Like Identity

Building an Identity Metasystem

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 @windley





sovrin

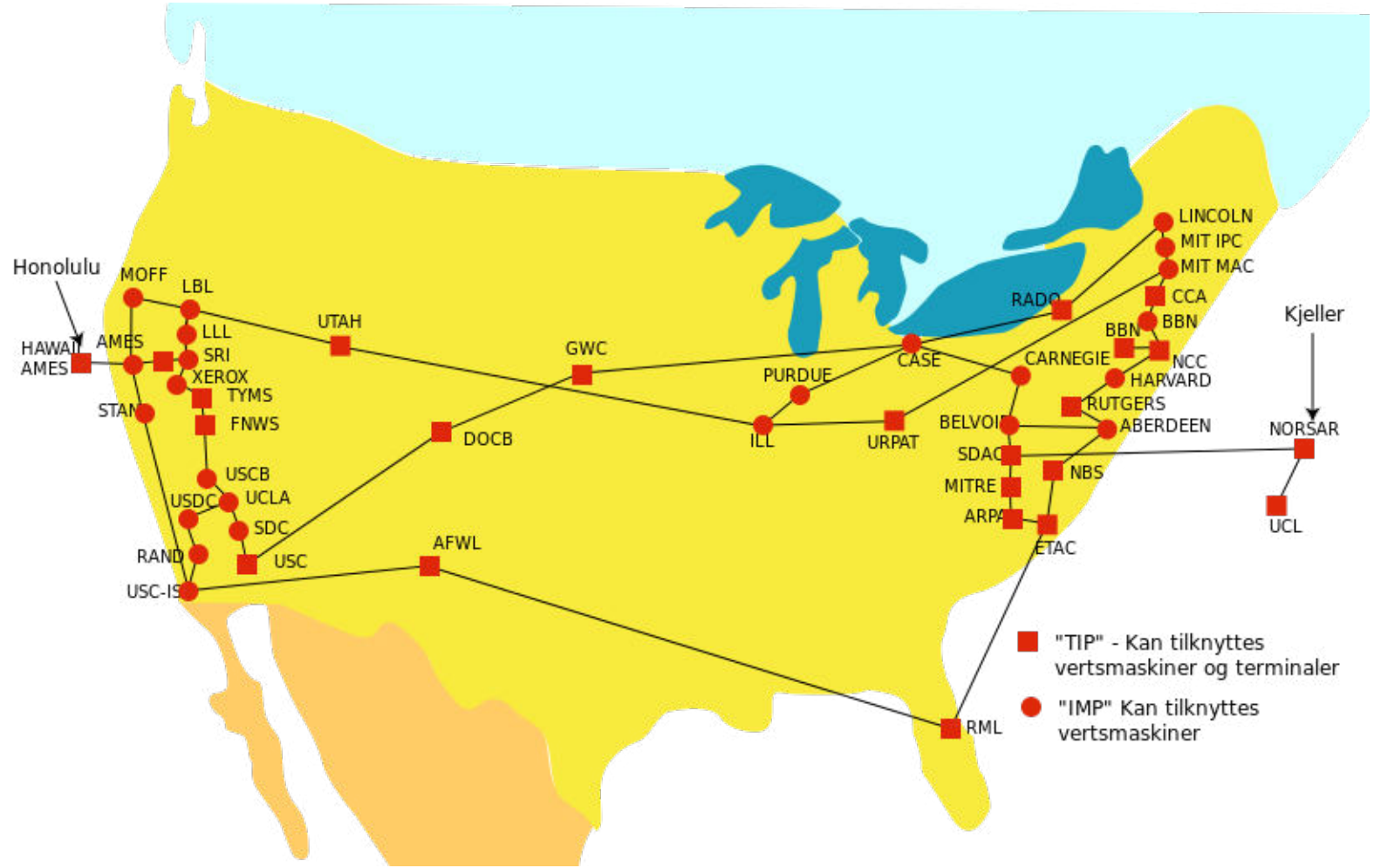
identity for all



The Problems with Digital Identity

- Proximity
- Autonomy
- Privacy
- Anonymity
- Flexibility
- Interoperability
- Scale

The Internet was created without a way of identifying the people and organizations who use it.





"On the Internet, nobody knows you're a dog."



Internet Identity Workshop

Kim Cameron



Microsoft's Chief Identity Architect

Formulated the Laws of Identity in 2005

Proposed the need for an identity metasystem to support those laws



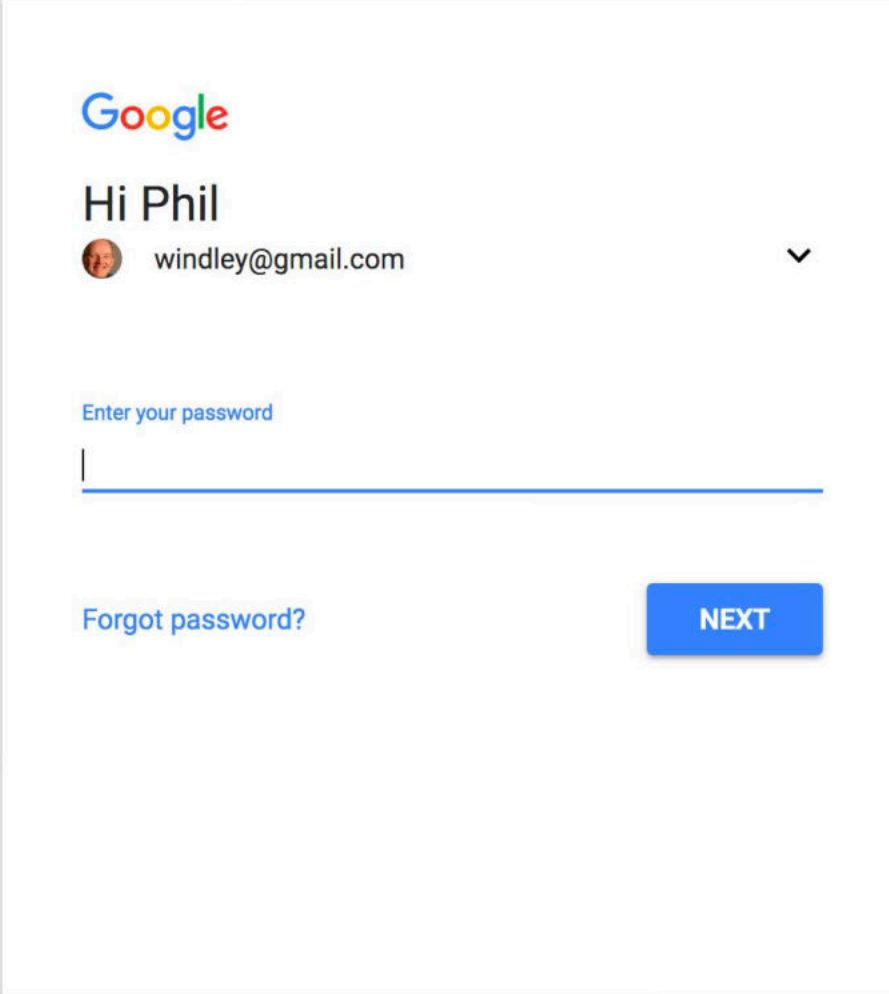
Microsoft

What is an Identity Metasystem?

Digital identity systems must exist
in a metasystem:

- Encapsulating **protocol**
- **Unified** user experience
- Where **users select** appropriate identity providers and features
- Not a **monolith**

Why do we build identity systems?



The image shows a Google login interface. At the top left is the Google logo. Below it, the text "Hi Phil" is displayed, followed by a small profile picture icon and the email address "windley@gmail.com". To the right of the email address is a downward-pointing chevron icon. Below this information is a text input field with the placeholder text "Enter your password". Underneath the input field is a blue "NEXT" button. To the left of the "NEXT" button is a link that says "Forgot password?".

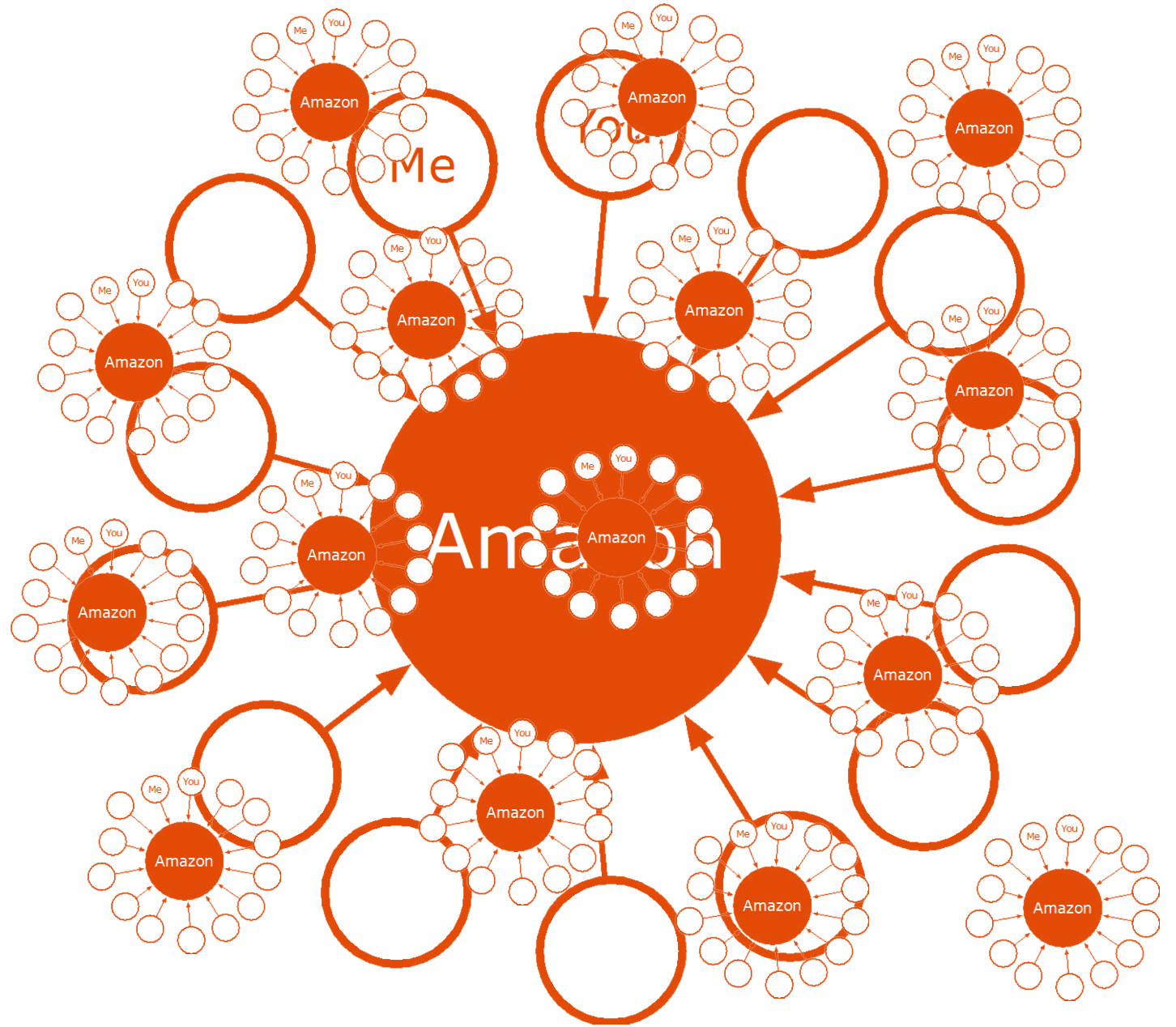
English (United States) ▾

[Help](#)

[Privacy](#)

[Terms](#)

Identity systems
are trust
frameworks



Trust frameworks
in the physical
world

North Dakota
LEGENDARY

USA
ND

DRIVER LICENSE

127

9 CLASS **DM** 12 RESTR **NONE** 9a END **NONE**

1 **SAMPLE**

2 **FRANCESCA**

8 **608 EAST BOULEVARD AVENUE
BISMARCK, ND 58505-0700**

4d LIC# **SAM-77-1234**

3 DOB **10/26/1977** 15 SEX **F**

4a ISS **10/26/2013** 16 HGT **5'-05"**

4b EXP **10/26/2019** 18 EYES **BRO**

Francesca Sample

5 DD **7SAM771234SF51926JA65NDN** REV **MM/DD/CCYY**

Identity in the Physical World

UNITED 

I

NAME: [REDACTED]
 DATE: 22JAN
 FF: H7XEBP

NAME: [REDACTED]
 191 DATE: 22JAN 191
 FF: B1 392683
 MILEAGE:

Security

SEAT: 60C
 CUP: 5

PASS

FLIGHT: UA 902Y
 DATE: **Z19** SEAT: 60C
 DEPART: 1215P
 FRANKFURT
 ARRIVE: 245P
 SAN FRANCISCO
 BOARD TIME: 1125A
 01672721252926
 A STAR ALLIANCE MEMBER

SHIEKH SHOES LLC
 2039 Westminster mall
 Westminster, CA 92683
 714-899-4822

Receipt #: A18385 Date: 6-19-02
 Cashier: 28 Time: 11:07
 SalesPerson: 10 ENRIQUE
 Trans Type: 01 Sale
 How Paid: 01 Cash

SKU	Descrip	SP	Siz	Wth	Qty	Amount
33-869 A	FRC1 MID		11		1	79.97
						Tax 6.20
						Total \$ 86.17
						Amount Paid 100.00
						Change \$ 13.83

no exchange/refund on worn items/30 day
 No exchange/refund without receipt

Up To Develop Time

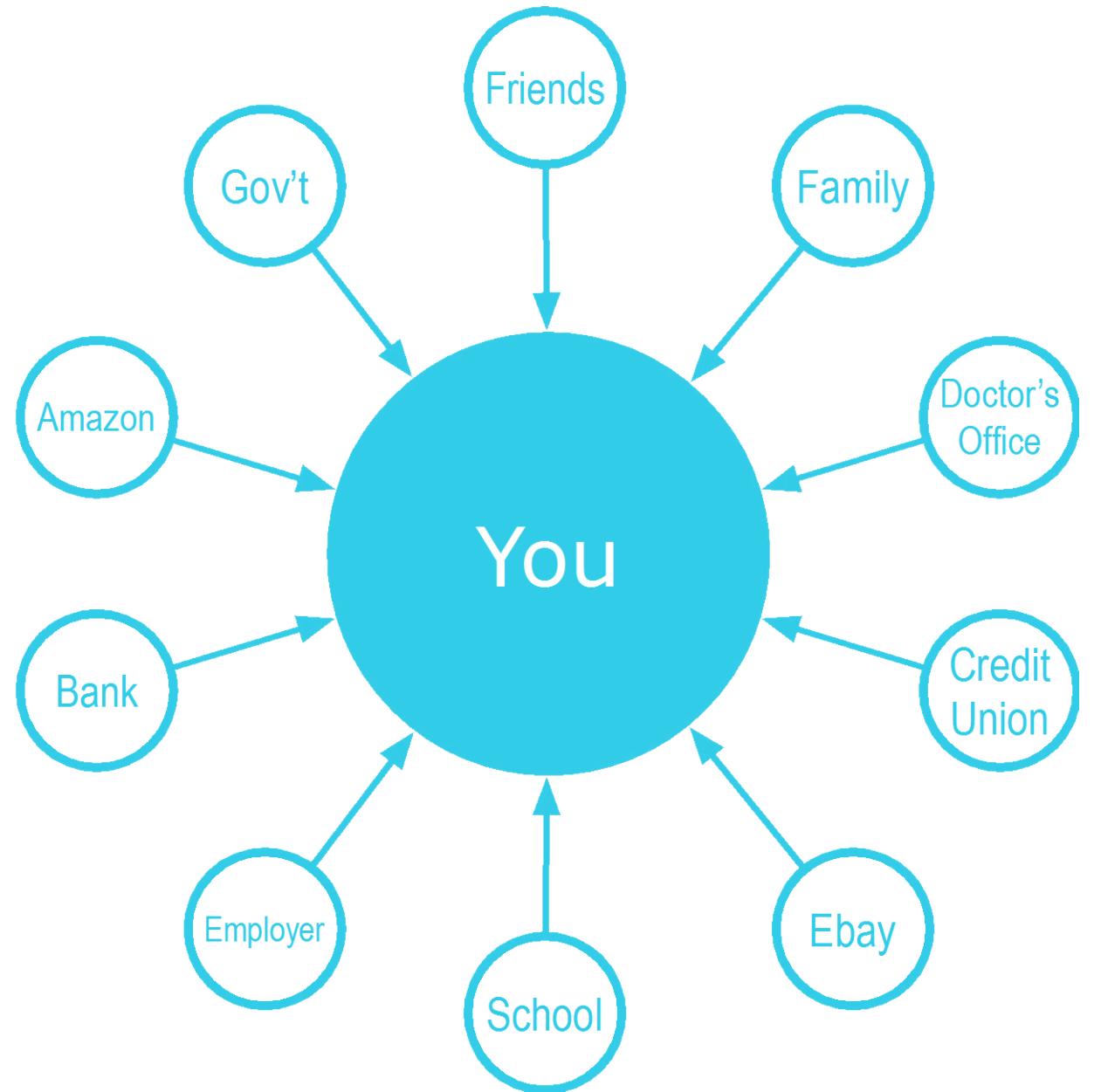
A to Z

Tyler

SUBJECT	M	M	M	M	M	M	M	M
MOTOR SKILLS								
1. Use scissors and glue to cut.								
2. Use glue.								
3. Use white glue.								
READINESS								
1. Know my first, middle and last name.								
2. Know my telephone and last name.								
3. Know my first name.								
4. Know my last name.								
5. Know my address.								
6. Know my telephone number.								
7. Know my birthday.								
8. Know my favorite color.								
9. Know my favorite food.								
10. Know my favorite animal.								
11. Know my favorite book.								
12. Know my favorite TV show.								
13. Know my favorite movie.								
14. Know my favorite sport.								
15. Know my favorite game.								
16. Know my favorite song.								
17. Know my favorite season.								
18. Know my favorite month.								
19. Know my favorite day of the week.								
20. Know my favorite time of day.								
21. Know my favorite place.								
22. Know my favorite animal.								
23. Know my favorite color.								
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100. Know my favorite song.								

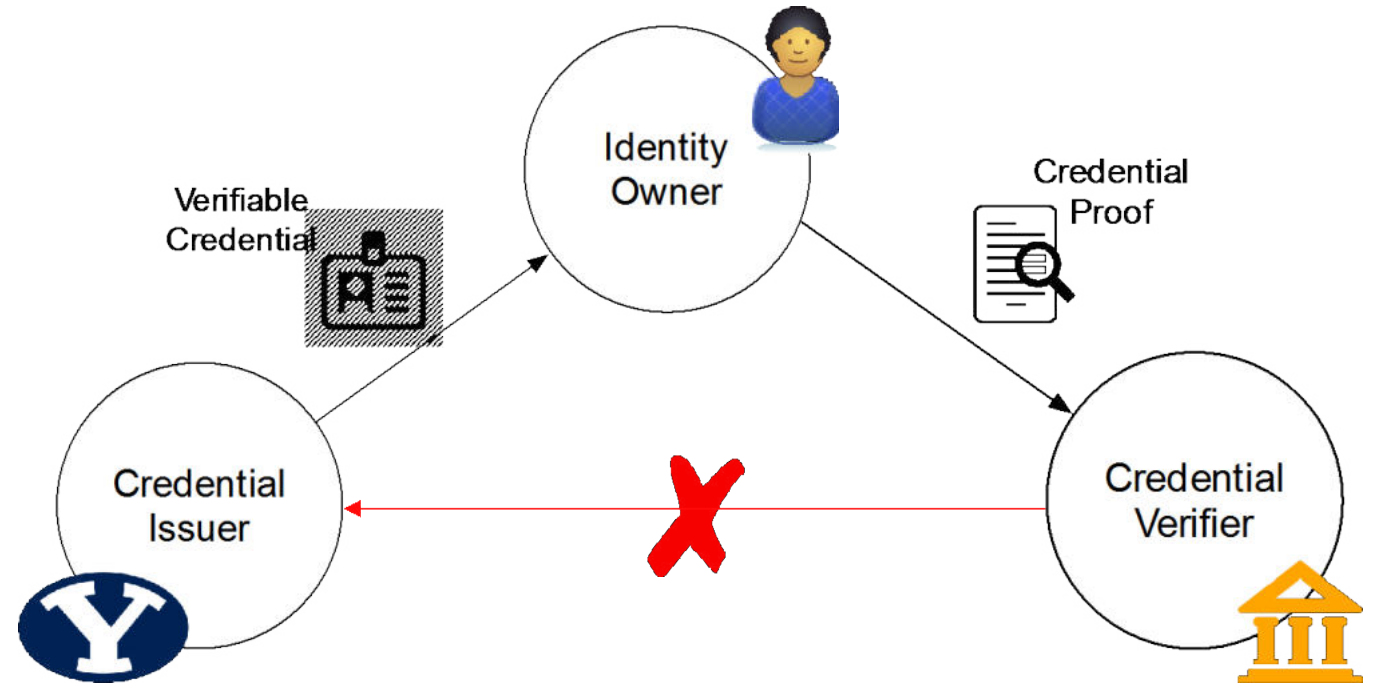
By Patricia
Illustration

Multi-source Identity

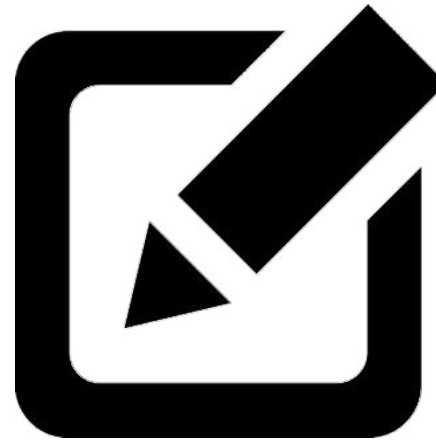


Verifiable Credentials

When you can instantly trust what someone says about themselves, workflows and integrations are dramatically simplified.

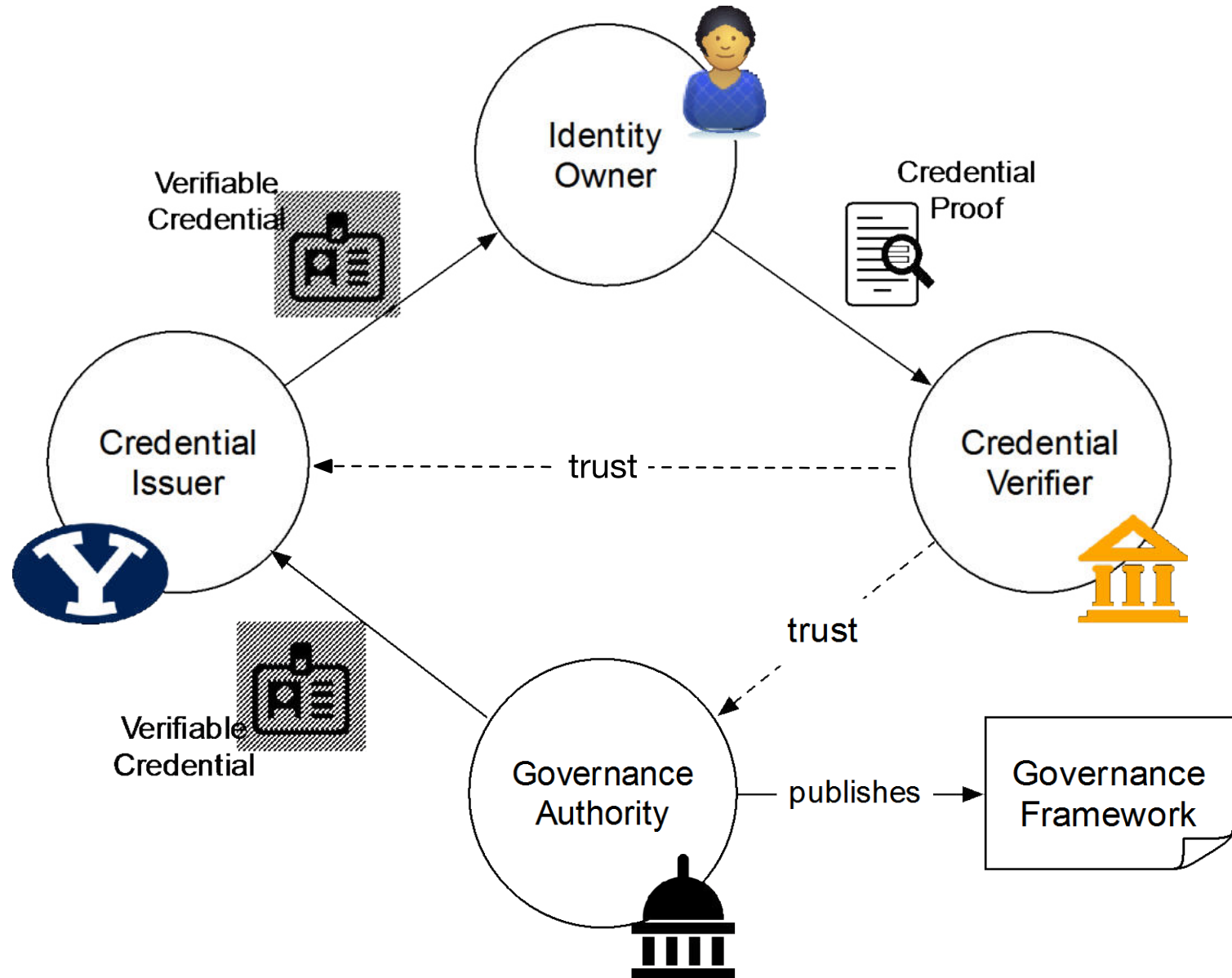


Four Checks a Verifier does when receiving a proof



The Trust Triangle

This model follows patterns that people have used for centuries and has several desirable features



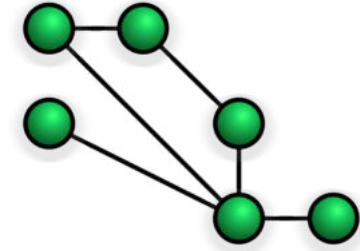


Demo

- <https://try.connect.me>
- Streetcred.id
- Others in beta

Connect.me and Streetcred.id wallets can be used to create connections, get credentials, and use them

Four Things Make Sovrin Work



Decentralized Identifiers

DIDs provide pairwise identifiers for every relationship to prevent correlation.

DID Descriptor Objects link DIDs to public keys and endpoints

Verifiable Credentials

Allow third parties to provide identity owners with credentials they can use just like they do offline.

P2P Agents

Support creating relationships and sharing verifiable credentials in a decentralized way.

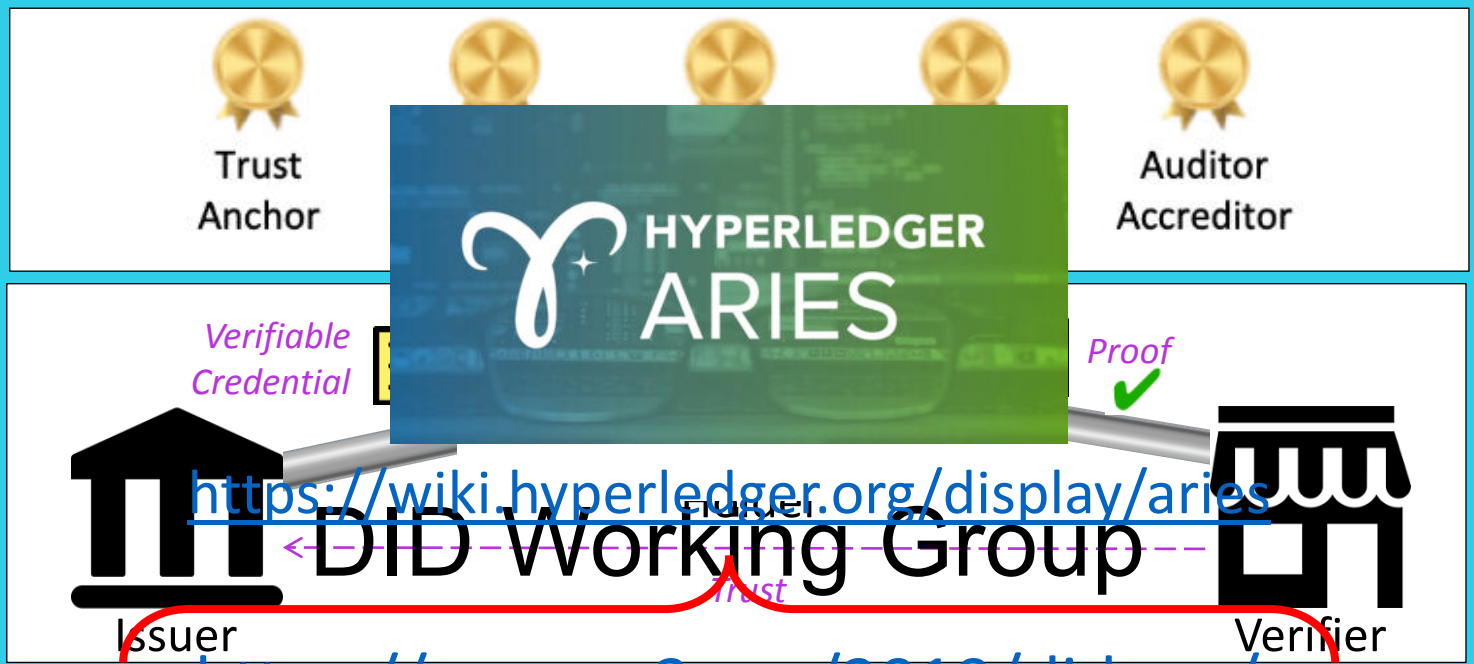
Distributed Ledger

Public DIDs
Revocation Schema
Credential Definitions

Context Specific Identity System

Layer Four:
Governance
Frameworks

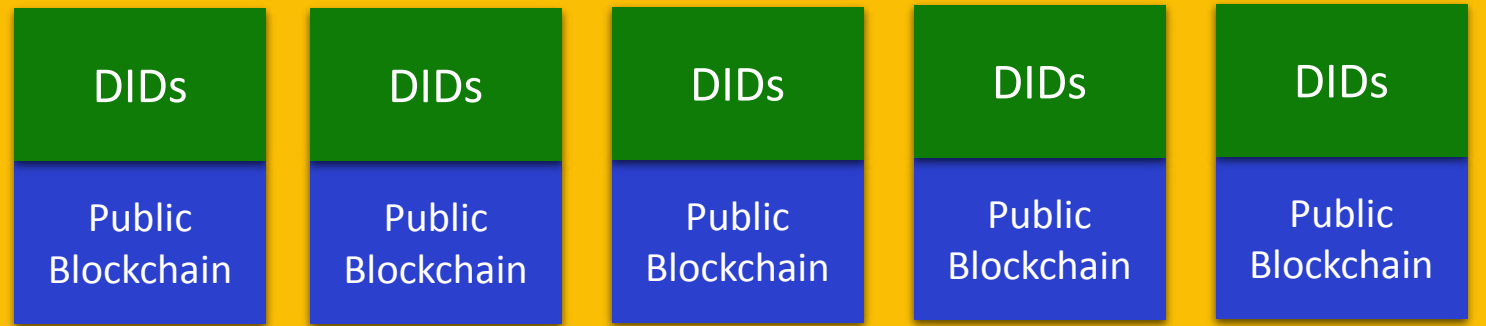
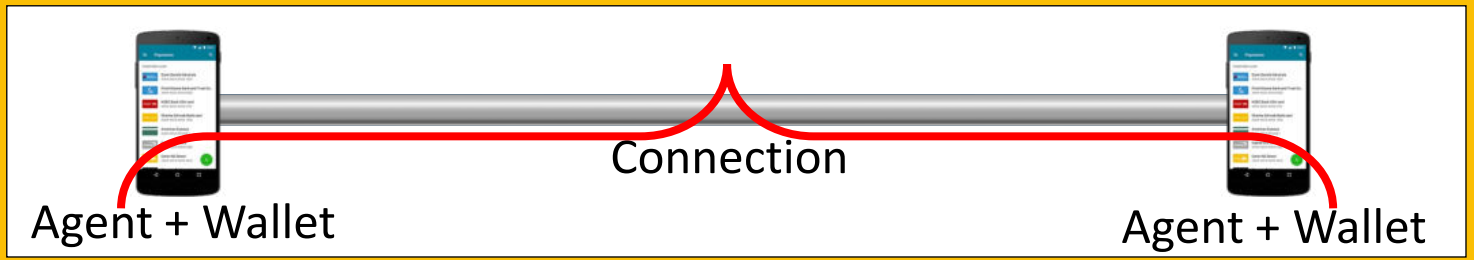
Layer Three:
Credential Exchange



Identity Metasystem

Layer Two:
Agent-to-Agent
DIDComm Protocol

Layer One:
DID Registries





Kim Cameron

As users, we need to see our various identities as part of an integrated world which none the less respects our need for independent contexts.

Privacy is a must-have feature for an identity utility



A identity
metasystem
changes online
interactions



Sovrin is in
production use
now



Trustworthy
credentials
reorder online
trust



A Global, Public Network for Trust at a Distance

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 @windley





sovrin

identity for all