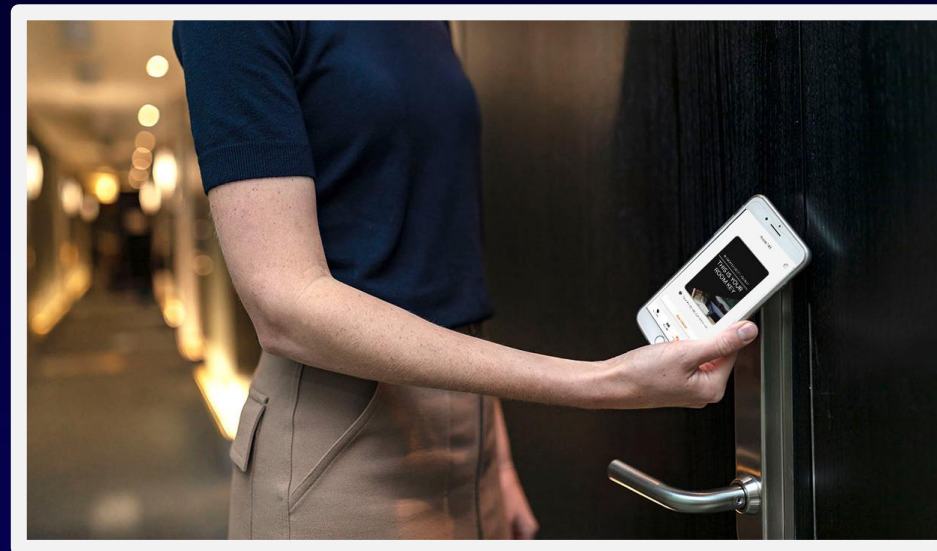
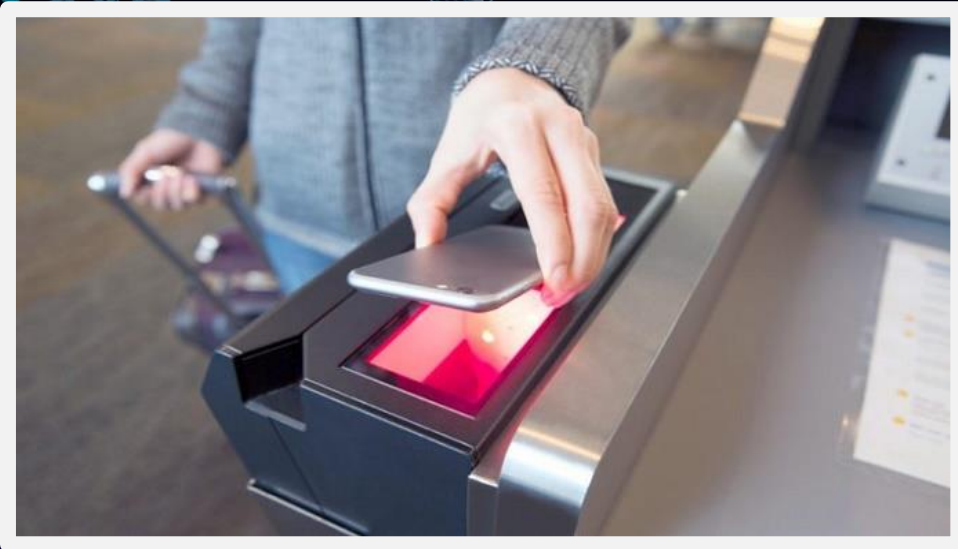


# The History and Future of Digital Wallets





# “Move over browser”

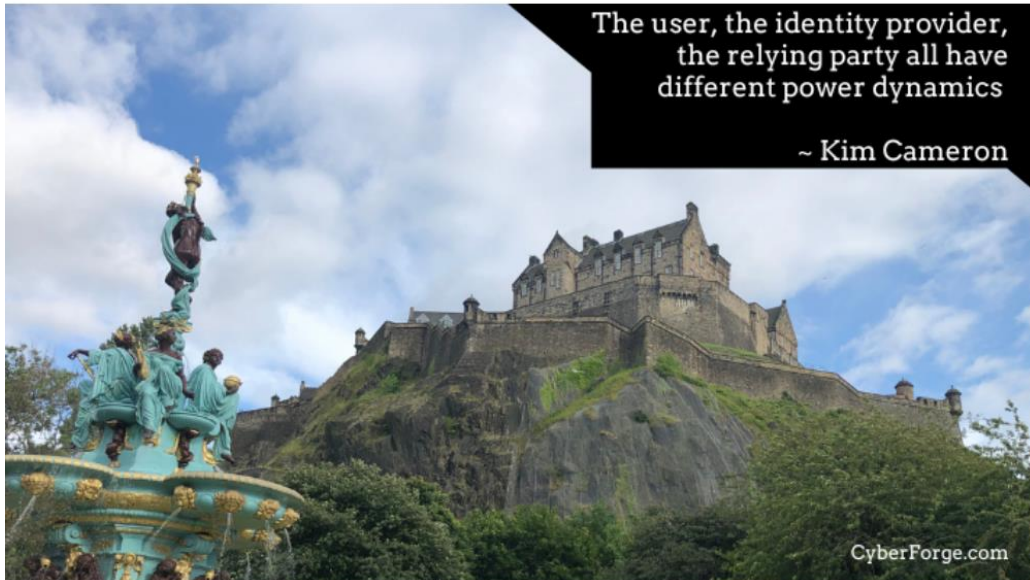
CyberForge

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## Asymmetric wallet wars

By [ANIL JOHN](#) on 15 December, 2022 | [Permalink](#)



## ‘Digital wallets to be as essential as browsers’: OpenWallet Foundation calls for builders

Feb 24, 2023, 6:38 pm EST | [Frank Hersey](#)

CATEGORIES [Biometrics News](#) | [Civil / National ID](#) | [Features and Interviews](#)



Forbes

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## The Wallet Wars Are Not About Money, They Are About Identity

David G.W. Birch

Contributor @

Author, advisor and global commentator on digital...

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Feb 1, 2023, 06:49am EST

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# Why the World Needs an Open Source Digital Wallet Right Now

---

February 2023



## Early wallets 2003-04



# Digital credentials 2006-11



Photo credit: Ian Brown, IIW, 2006

# Digital credentials 2006-11

## What is a Digital Identity?

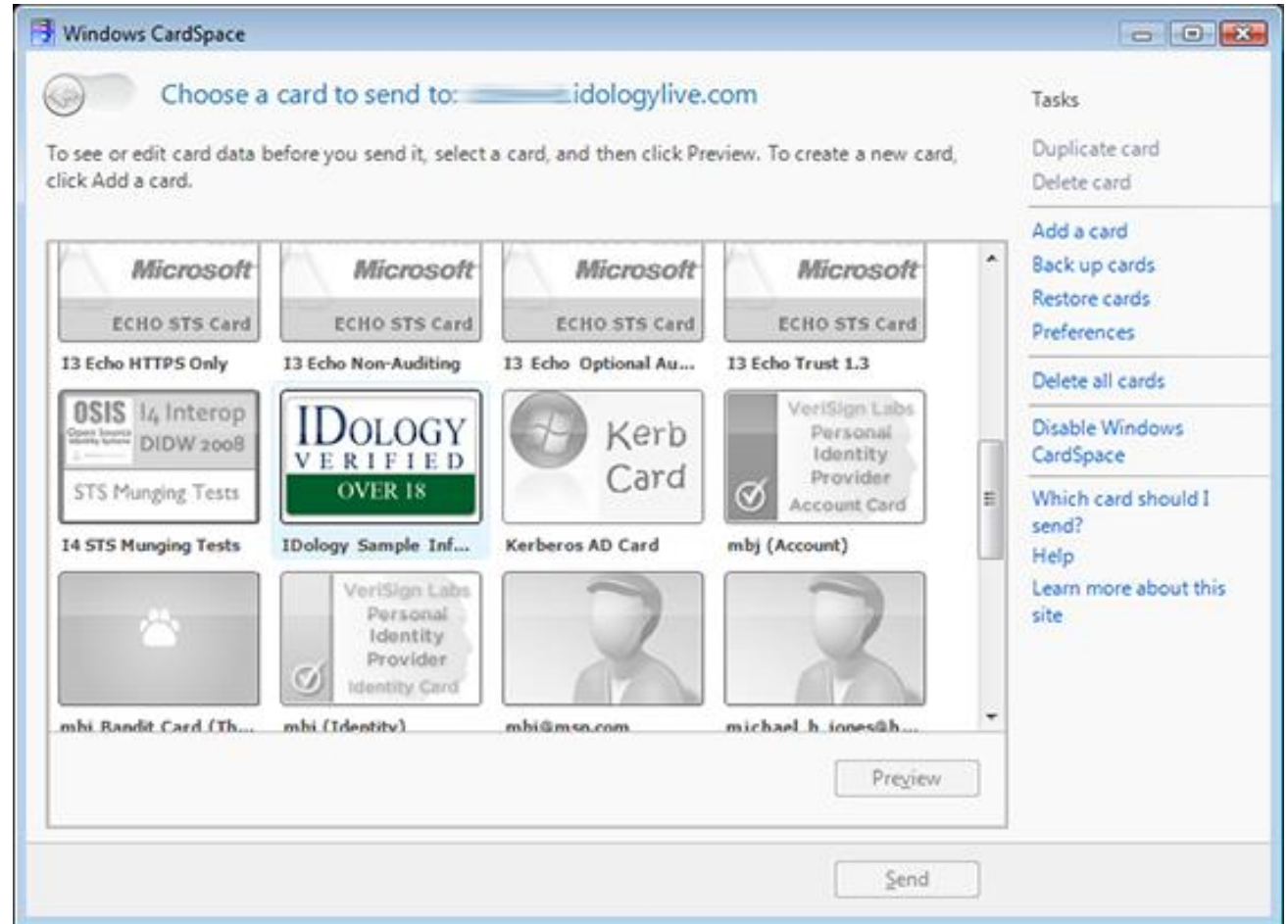
- Set of *claims* one subject makes about another
- Many identities for many uses
- Required for transactions in real world and online
- Model on which all modern access technology is based



Ref: "Cardspace". March 2007



# Digital credentials 2006-11



Ref: Mike Jones, *Self Issued*, 2008



# The smartest move 2011-12

Media & Entertainment

## TechCrunch Review: Google Wallet

Greg Kumparak @grg / 6:24 AM GMT+10 • September 20, 2011

 Comment

I have seen the future, and it is called Google Wallet.



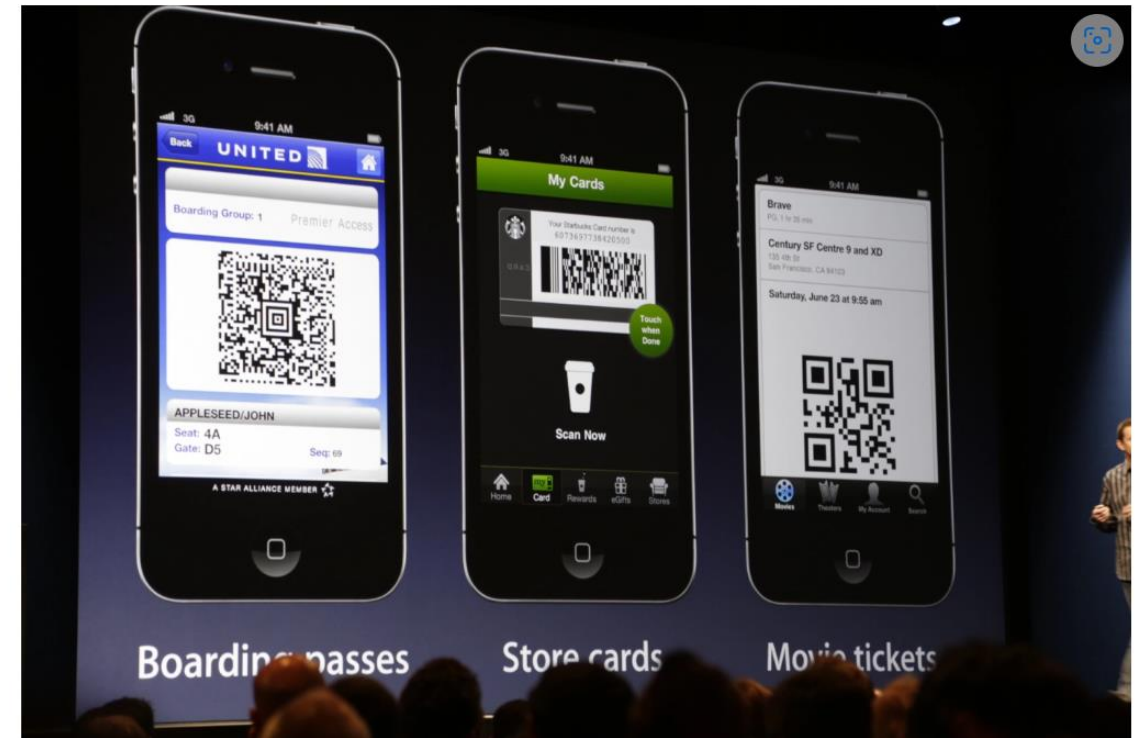
# The smartest move 2011-12

Media & Entertainment

## Apple Announces New Passbook App To Store Movie Tickets, Retail Cards, And Boarding Passes

Anthony Ha @anthonyha / 4:50 AM GMT+10 • June 12, 2012

 Comment



# Learning from the evolution of cards



# Evolution of cards

5. Integrated

4. Intelligent

3. Data protected

2. Machine readable

1. Manual



1950

1960



1970



1980

1990



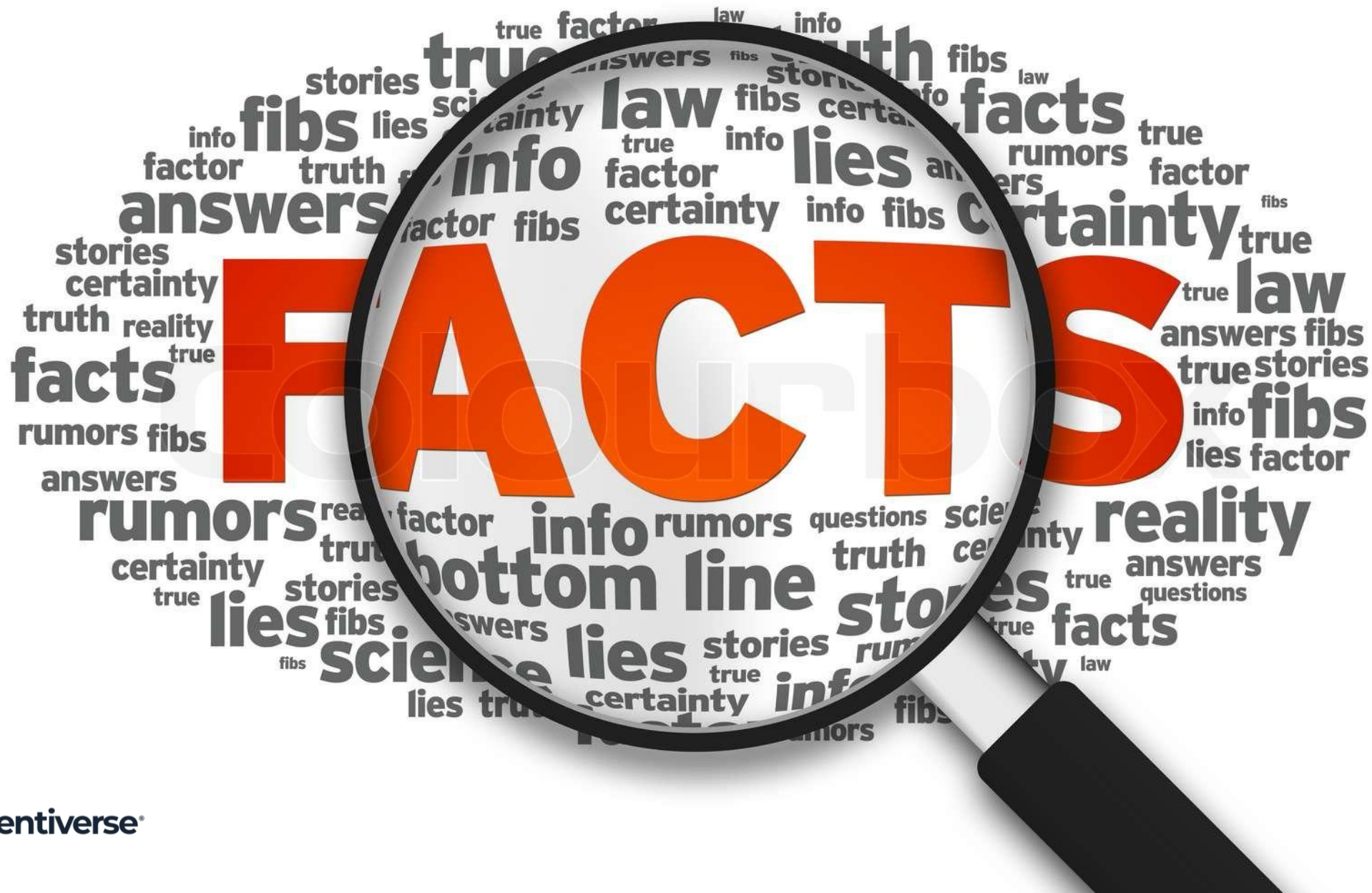
2000

2010

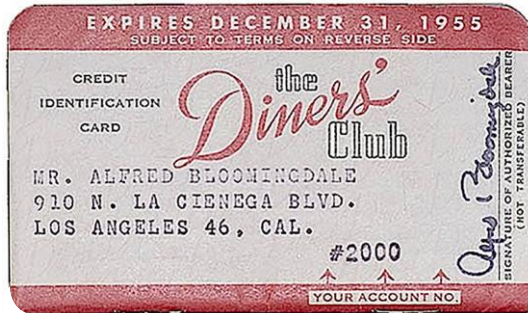


2020

#identiverse



# Data and metadata





# Wallet technology

## Verifiable Credential

Credential Identifier

Claim

Credential Metadata

Issuer Signature

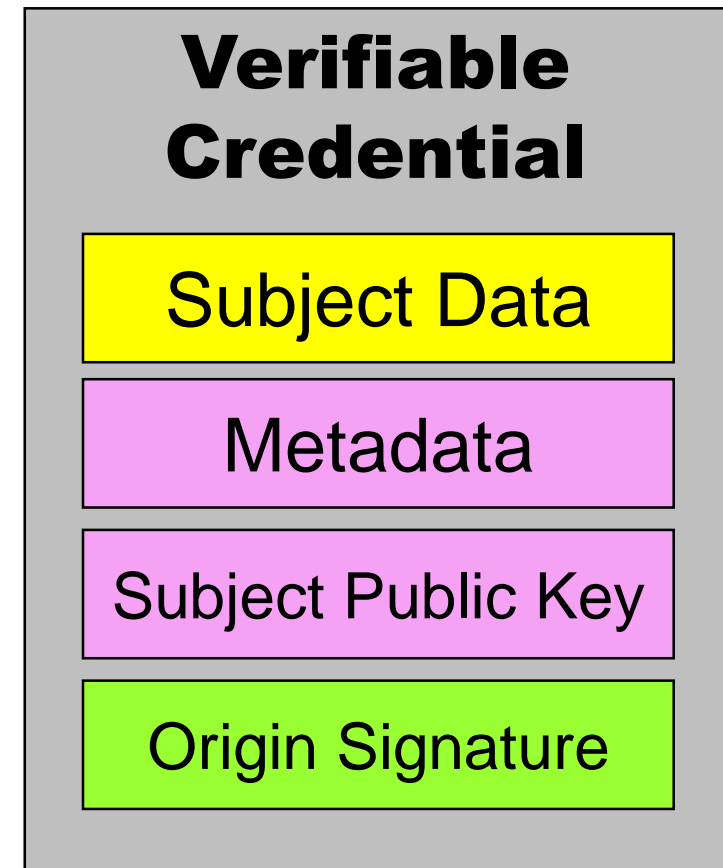
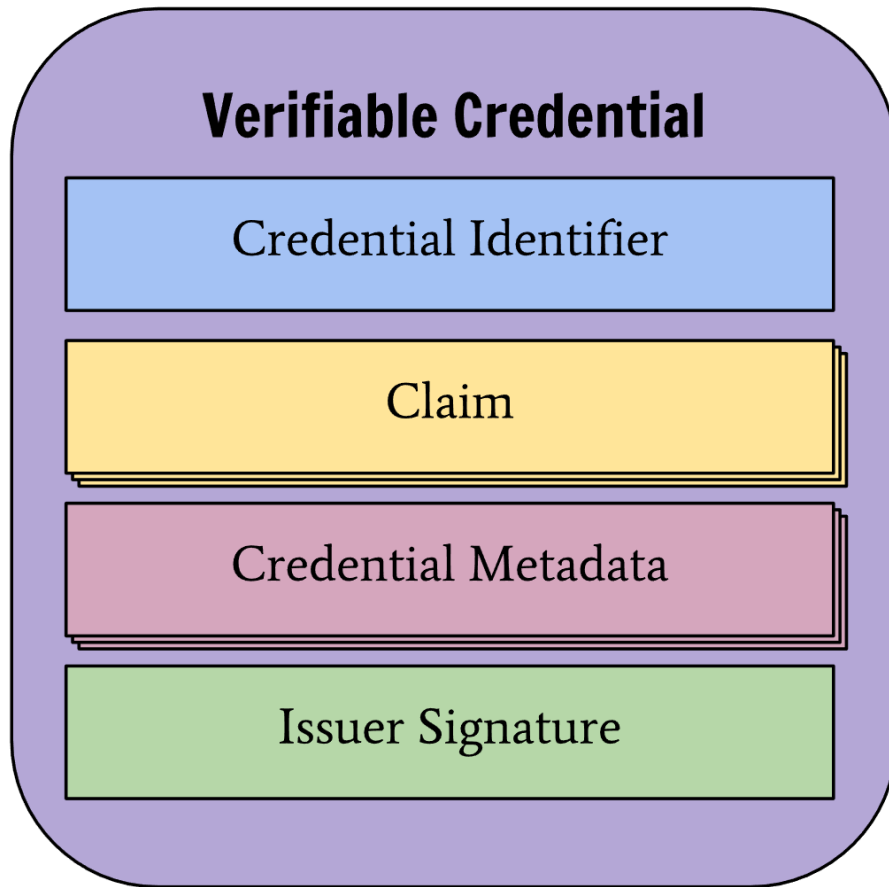
## Verifiable credential

W3C Verifiable Credentials Data Model 1.0

World Wide Web Consortium

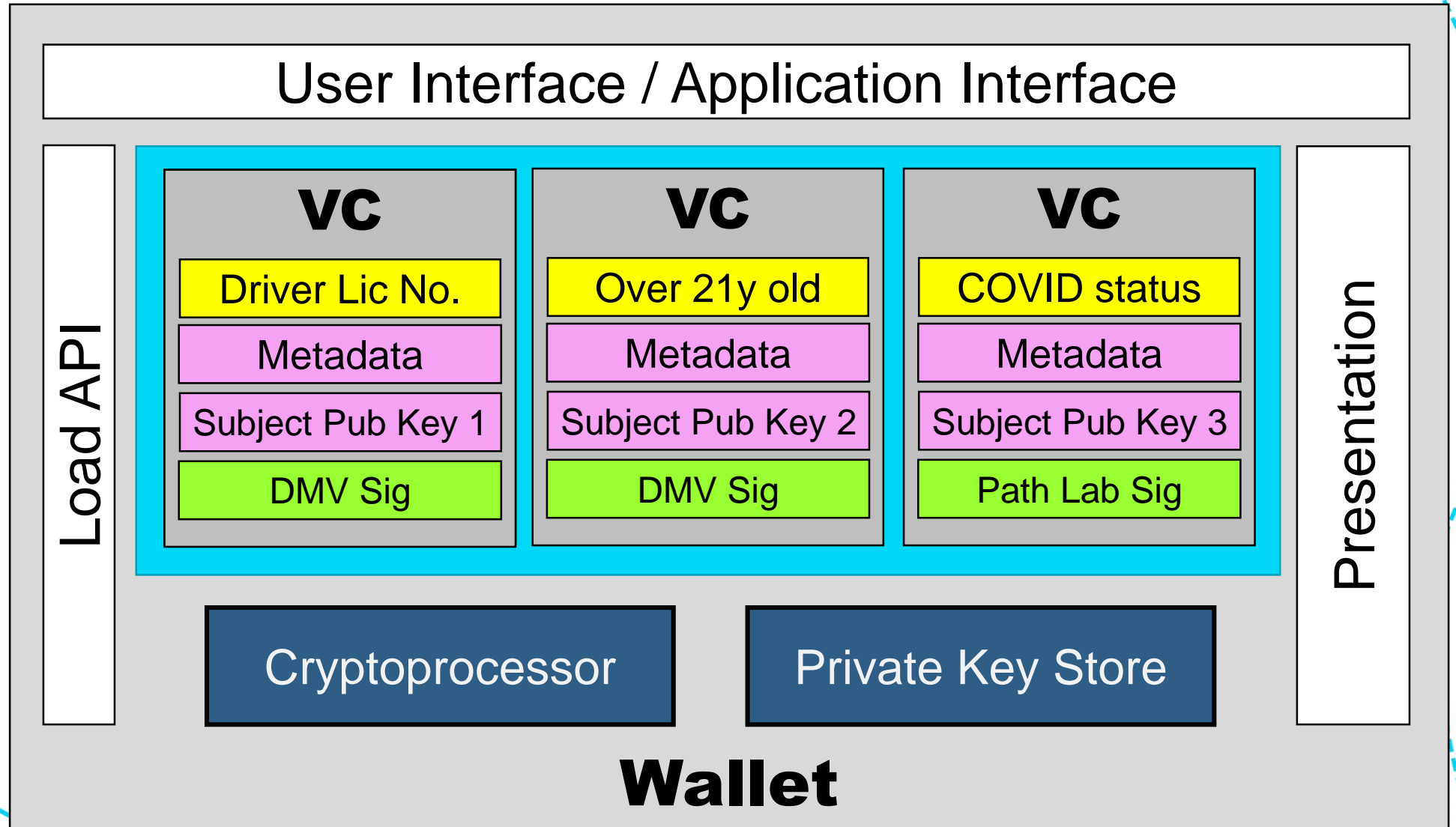
3 March 2022

# Abstracted verifiable credential



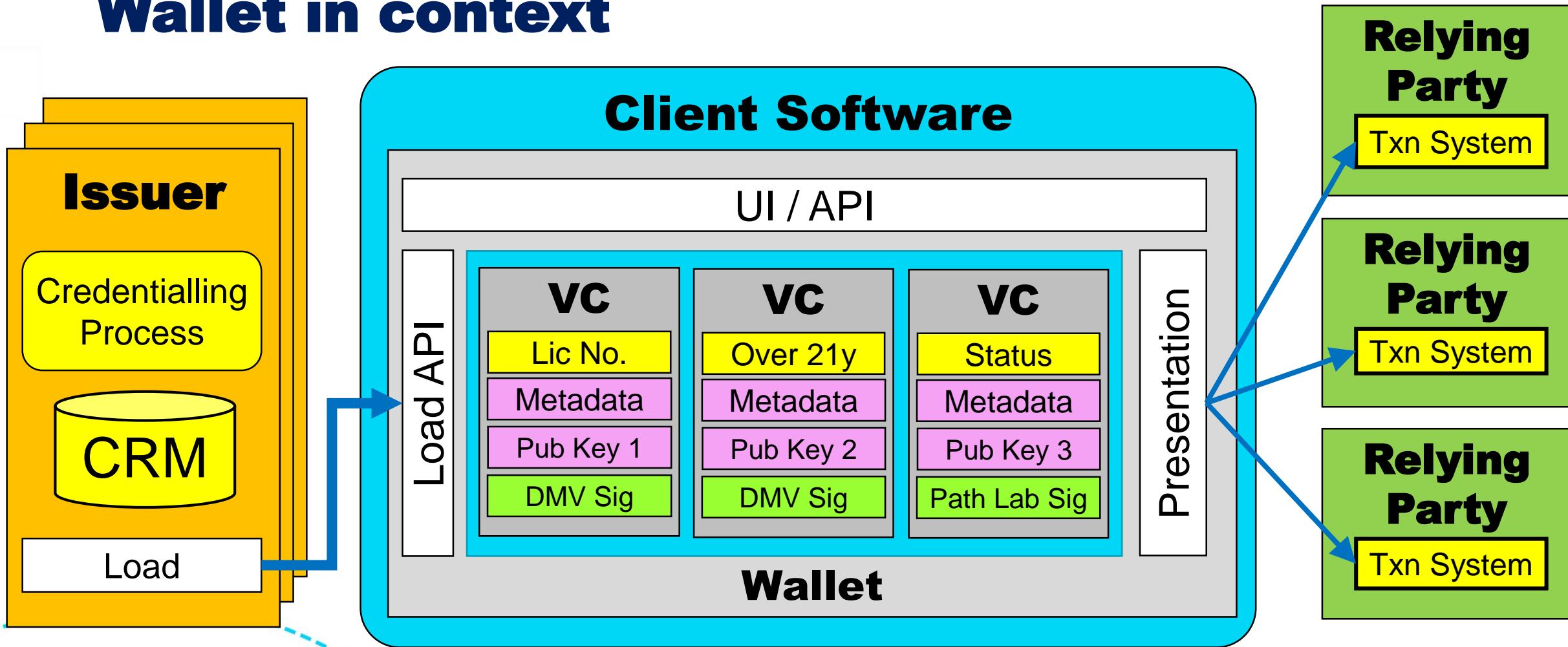


# Wallet



# Wallet acceptance

# Wallet in context

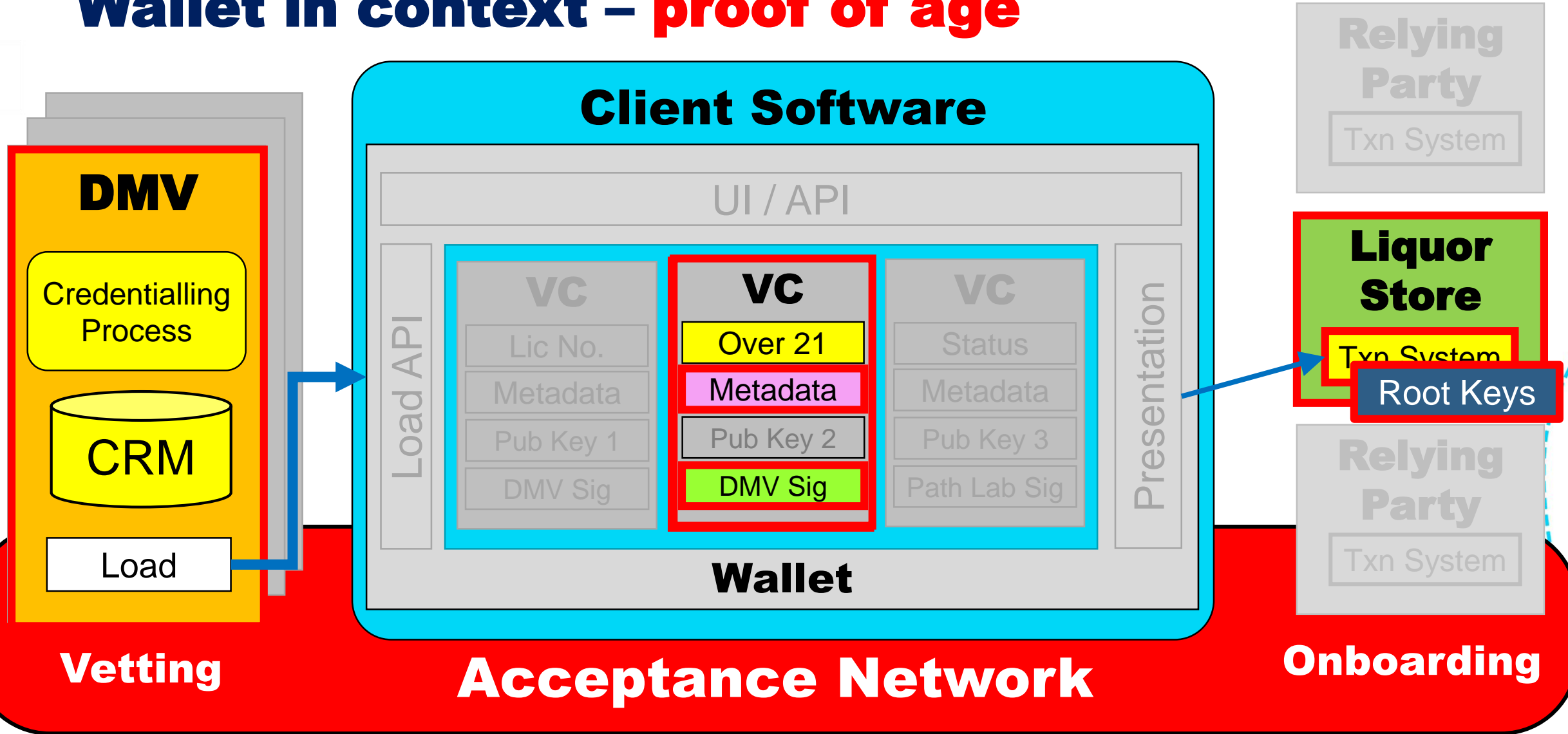






**Verifiable credentials  
don't verify themselves.**

# Wallet in context – proof of age





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INTERNATIONAL®



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CLUB MEMBER

MEMBER SINCE 12 DC XX VALID 00/00 THRU 00/00



## Uncomfortable truth

*“The whole system of identity emanates from the relying parties... If they don't like it, it goes nowhere”*

— Kim Cameron, IIW 2016  
quoted by Tarun Wadhwa



Picture credit: Doc Searls





# THANK YOU!





# Stephen Wilson

Principal

Lockstep Consulting

[www.lockstep.com.au/DVP](http://www.lockstep.com.au/DVP)