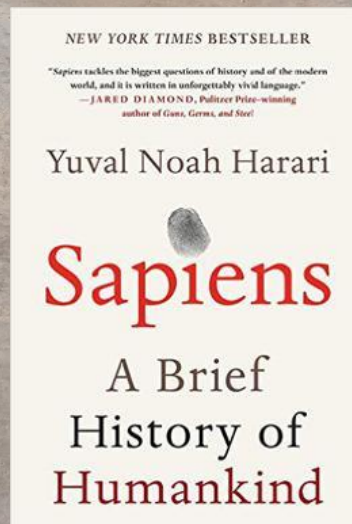
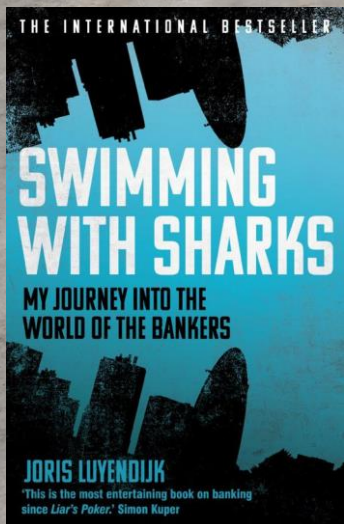




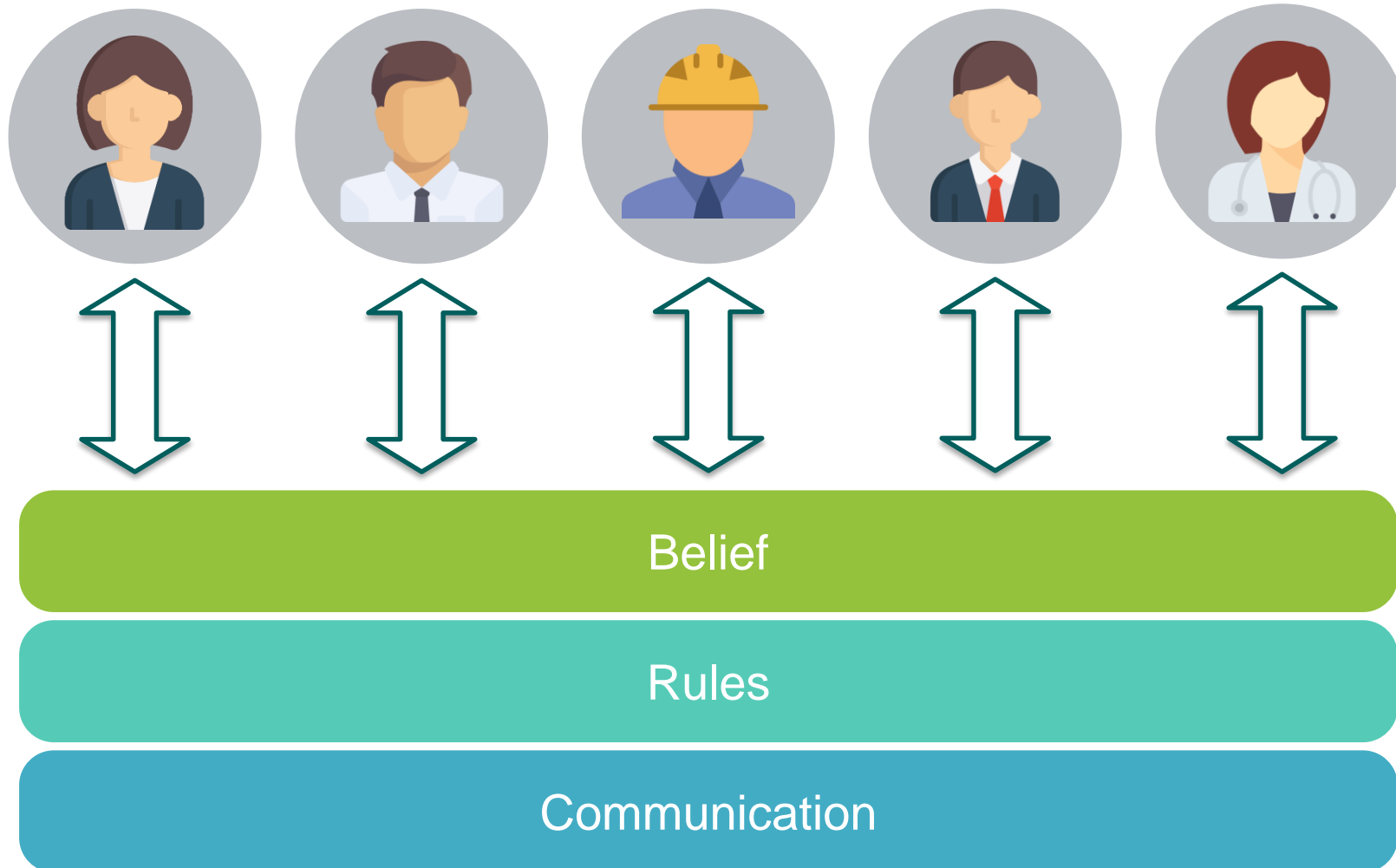
Blockchains

Taking ecosystems to the moon

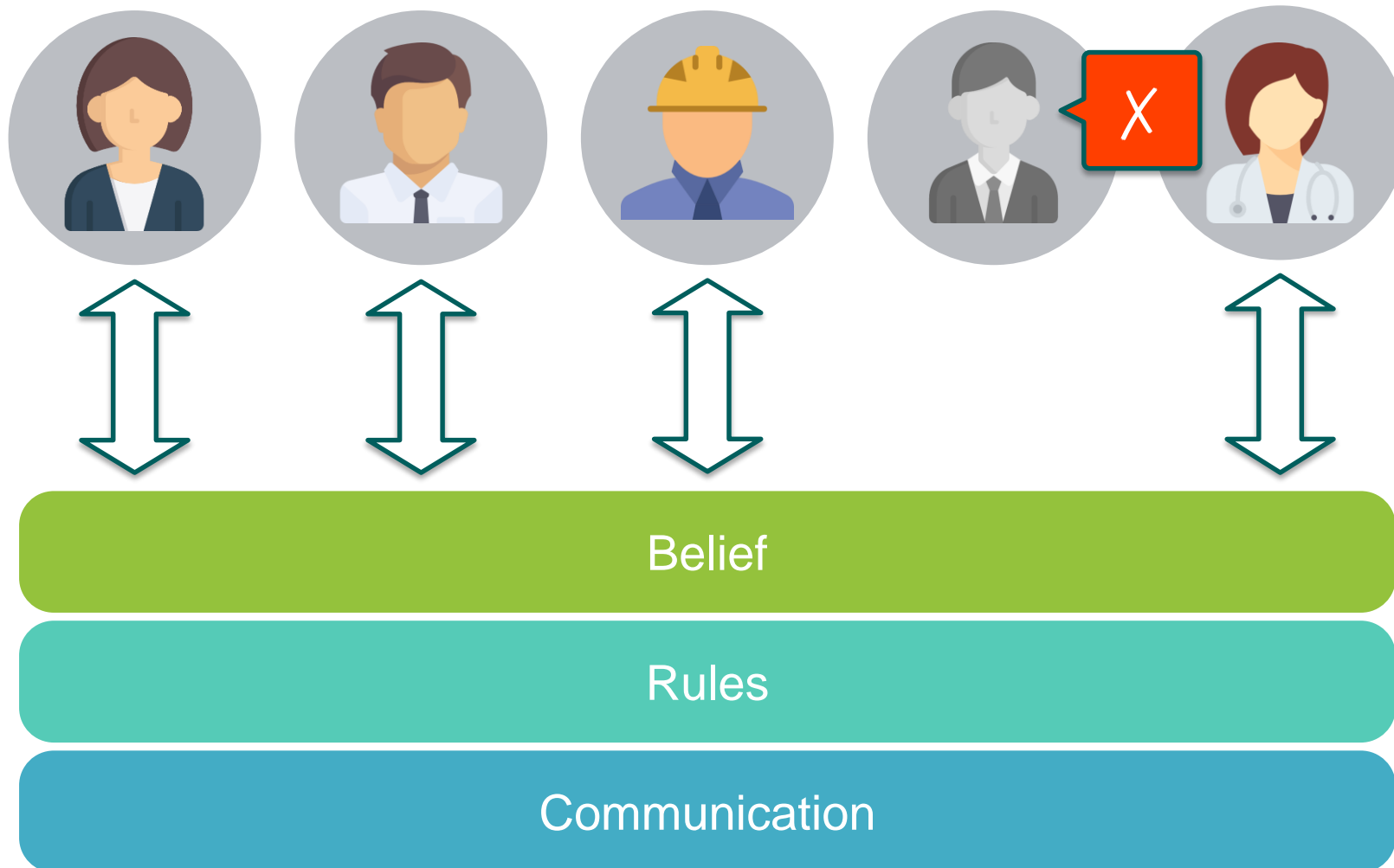
Tim Blankers



Building ecosystems



Building ecosystems



COMPANY

ADDRESS

IMP LOG

MONTH OF

ENGINEER IN CHARGE

COMPUTER SERIAL NO.

DATE	METER	PROBLEM & REMEDY	OPERATOR	DOWNTIME
29 Oct 69	1750	IMPIST RUNNING - TESTING LINE TO UCSB - LINE IS OPEN SO 'B' REG IS COUNTING ERRORS BUT SHOULD CEASE COUNTING IF TEL. CO. GETS LINE FIXED. CHARLEY PLEASE CALL BEN AT SRI!	T. HATCH	
29 Oct 69	2100	LOADED OP. PROGRAM FOR BEN BARKER BBV	CSK	
	22:30	Talked to SRI Host to Host	CSK	
		Left op. imp. program running after sending a host dead message to imp.	CSK	
30 Oct 69	1030	Stopped op. prog Started IMPIST to trace line trouble on TGIW (UCSB)	T. HATCH	

CUSTOMER SERVICE

SDS-S-324

POLY BERANEK
CONSULTING DEVS

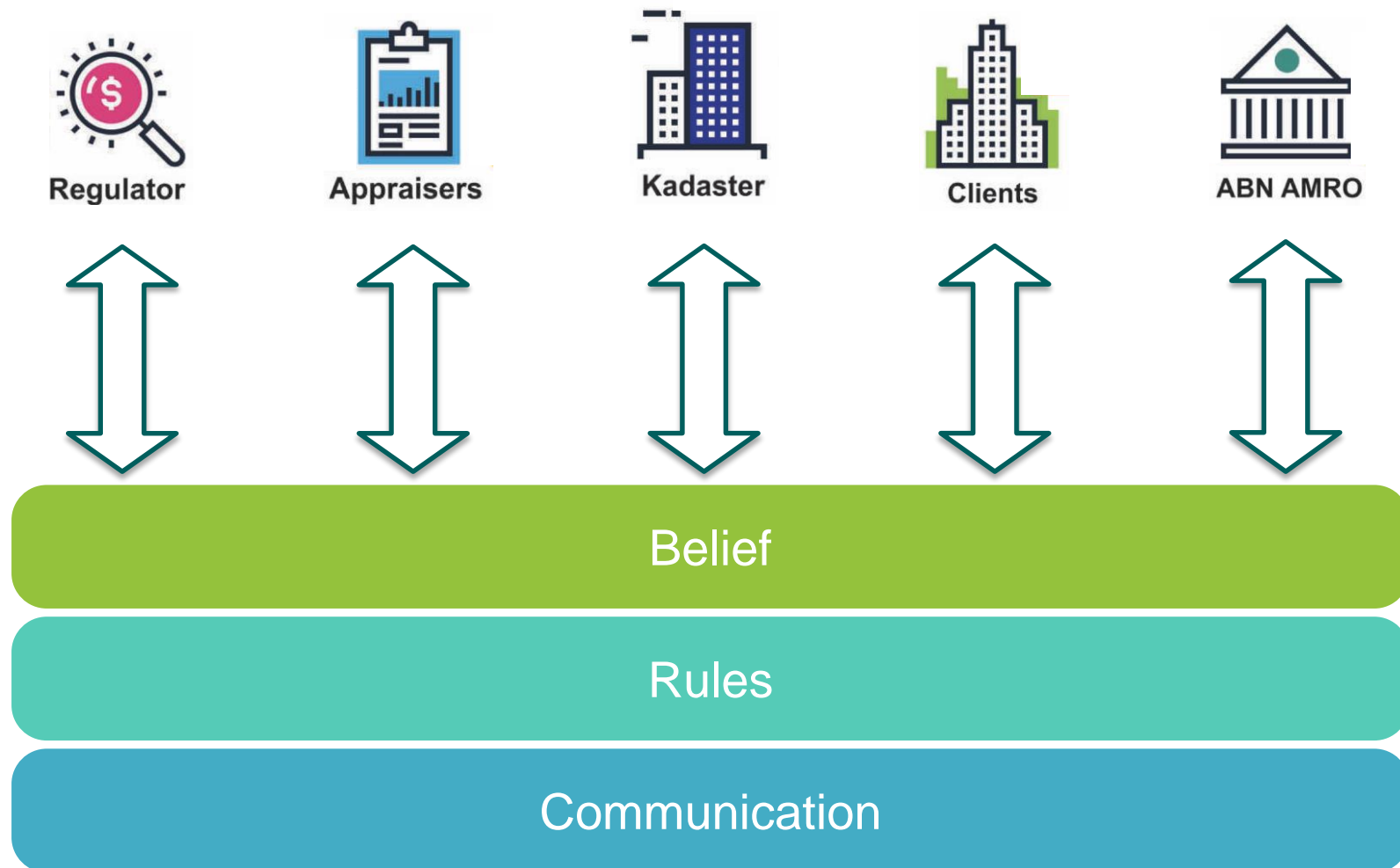
30 March 1970

26

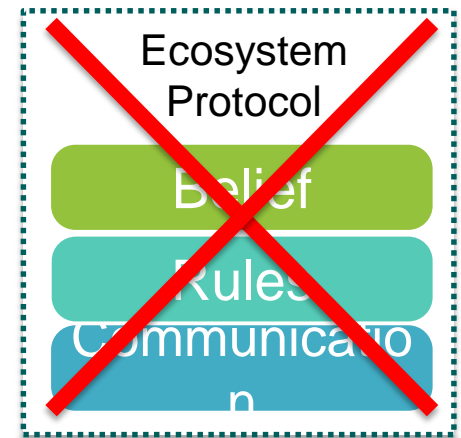
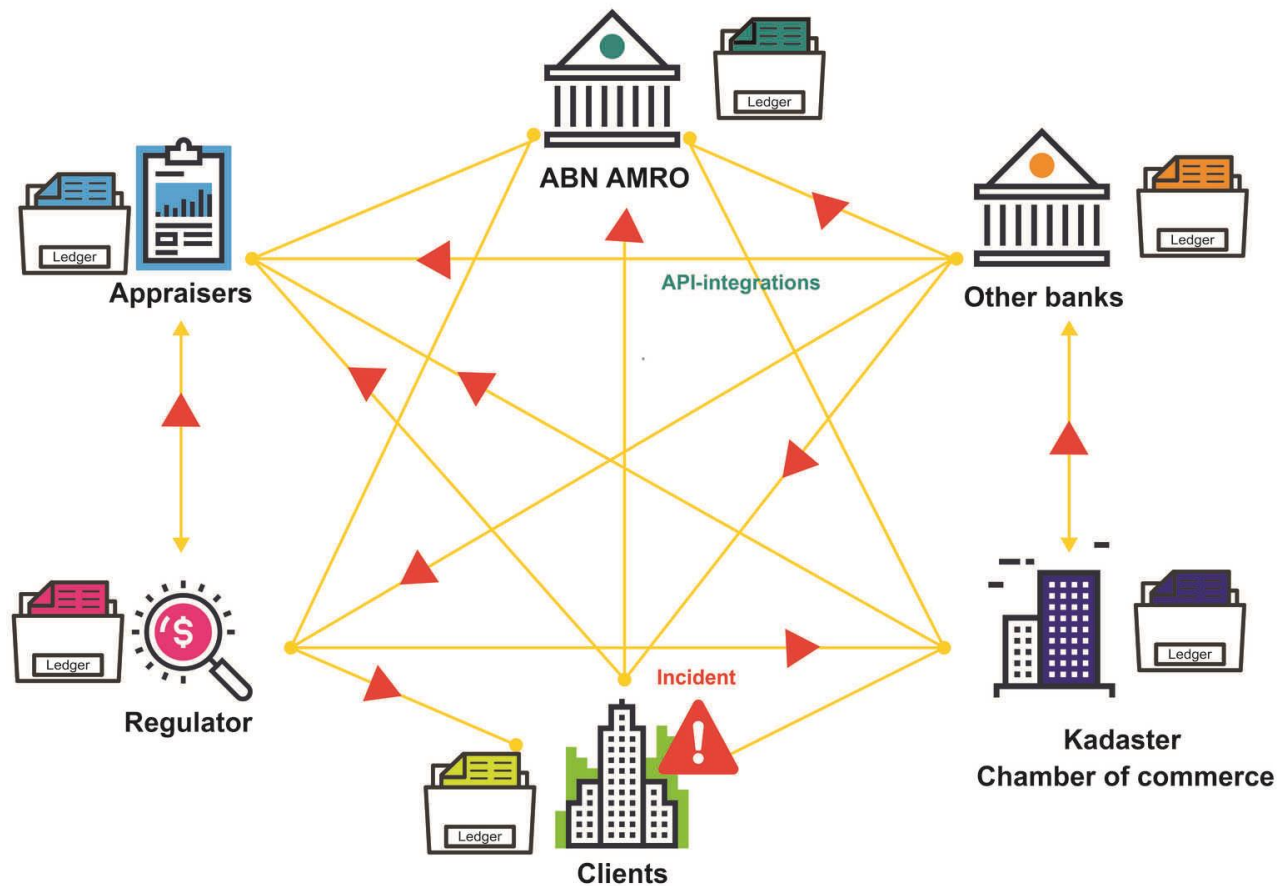




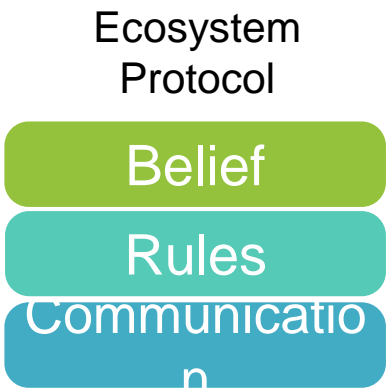
Real Estate Ecosystem



Current State



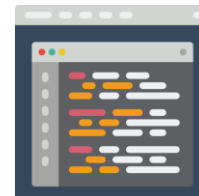
Protocol Design



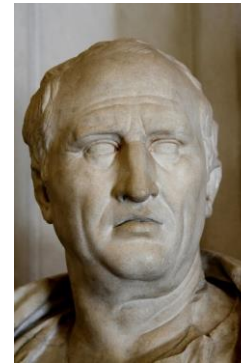
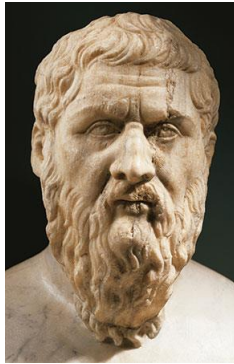
vs.



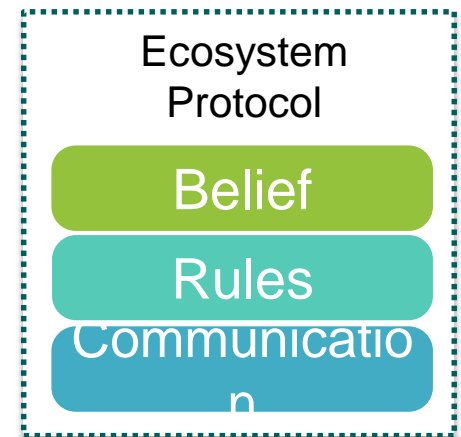
vs.



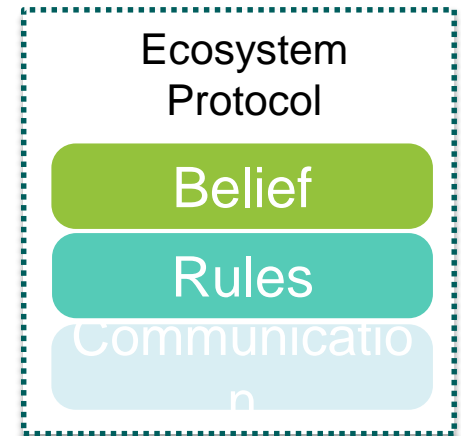
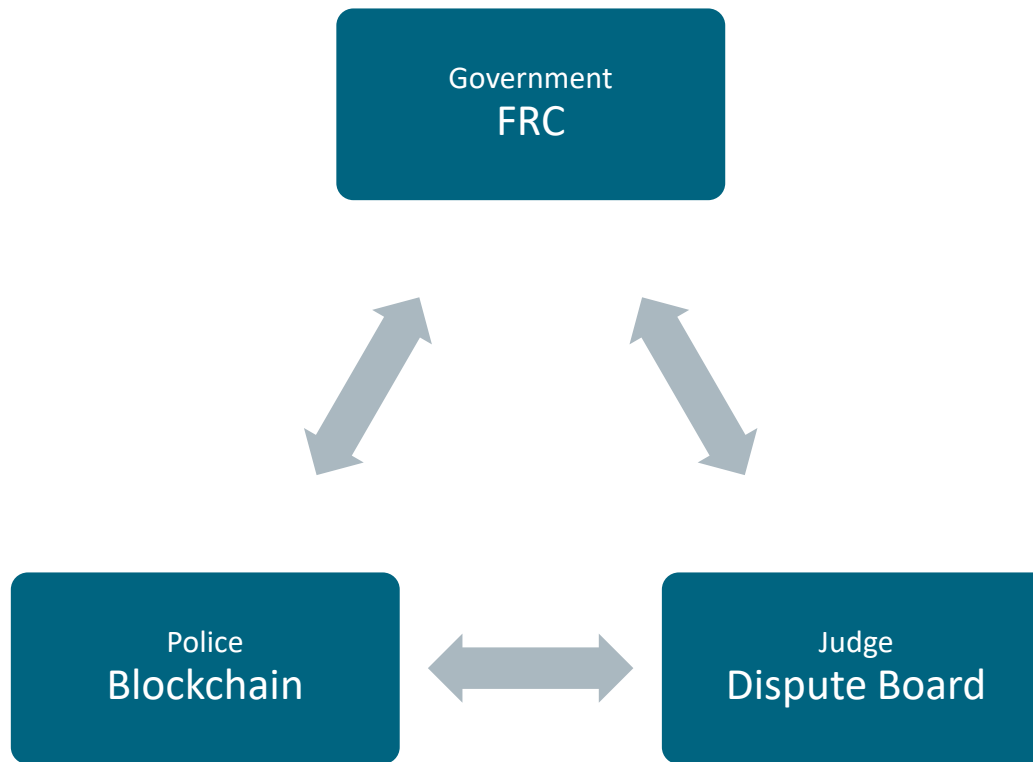
The Dilemma



Central	Decentral
Power is concentrated	Power is spread
Single point of failure	Resilient
Fast and cheap	Slow and expensive
Requires high trust	Requires less trust



Organizational Governance



Communication

One language

One set of definitions

```
<frc-vt-i:BAGVB0ID contextRef="Collateral_Duration">125230</frc-vt-i:BAGVB0ID>
<frc-vt-i:BAGPandID contextRef="Collateral_Duration">789586</frc-vt-i:BAGPandID>
<frc-vt-i:IPDtype contextRef="Collateral_Instant">20</frc-vt-i:IPDtype>
<frc-vt-i:TypingDescription contextRef="Collateral_Instant">Typing Description</frc-vt-i:TypingDescription>
<frc-vt-i:LandRegisterArea decimals="INF" contextRef="Collateral_Instant" unitRef="Collateral_Instant">
<frc-vt-i:OwnershipPercentage decimals="INF" contextRef="Collateral_Instant" unitRef="Collateral_Instant">
<frc-vt-i:GroundInterest contextRef="Collateral_Instant">3</frc-vt-i:GroundInterest>
<frc-vt-i:CountyLandRegister contextRef="Collateral_Instant">R</frc-vt-i:CountyLandRegister>
<frc-vt-i:ConstructionYear contextRef="Collateral_Instant">1999</frc-vt-i:ConstructionYear>
<rj-i:DocumentPresentationCurrency contextRef="Adim_Duration">EUR</rj-i:DocumentPresentationCurrency>
<nl-cd:DocumentCreationDate contextRef="Adim_Duration">2017-03-06</nl-cd:DocumentCreationDate>
<frc-vt-i:ReportingDate contextRef="Adim_Instant">2017-02-04</frc-vt-i:ReportingDate>
<frc-vt-i:DestinationBankName contextRef="Adim_Instant">ING</frc-vt-i:DestinationBankName>
<venj-bw2-i:ChamberOfCommerceRegistrationNumber contextRef="Adim_Duration">1234567</venj-bw2-i:ChamberOfCommerceRegistrationNumber>
<venj-bw2-i:LegalEntityName contextRef="Adim_Duration">ABC B.V.</venj-bw2-i:LegalEntityName>
<frc-i:LegalEntityLegalFormBanks contextRef="Adim_Duration">Besloten vennootschap</frc-i:LegalEntityLegalFormBanks>
<rj-i:BusinessNames contextRef="Adim_Duration">ABC</rj-i:BusinessNames>
<venj-bw2-i:LegalEntityRegisteredOffice contextRef="Adim_Duration">Amsterdam</venj-bw2-i:LegalEntityRegisteredOffice>
```

Ecosystem
Protocol

Belief

Rules

Communication

Mortgage Contract

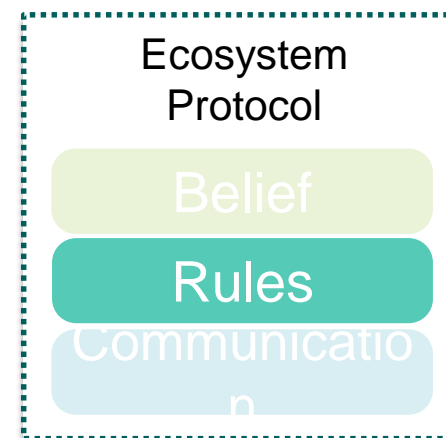
```
// example mortgage
legal_prose = hash_legal_prose

if new_owner.credit_score > 1000
if energy_label < C
    iot.sensor1 < 25C
    iot.sensor2 > 85%
if prev_owner == building.owner

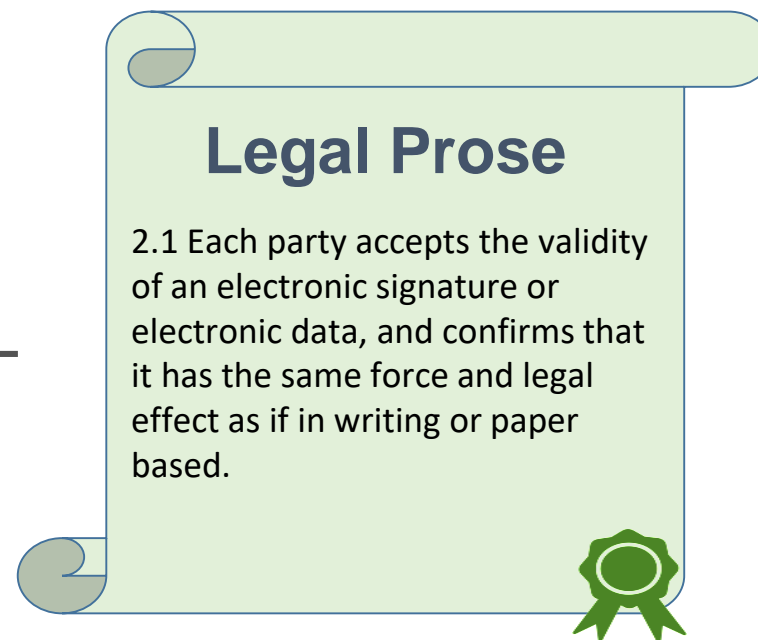
then

building.owner = new_owner

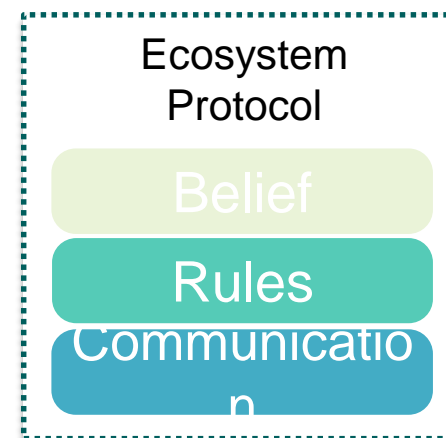
digital signatures
- building.owner
- new_owner
- kadaster
- bank
- notary
```



hash

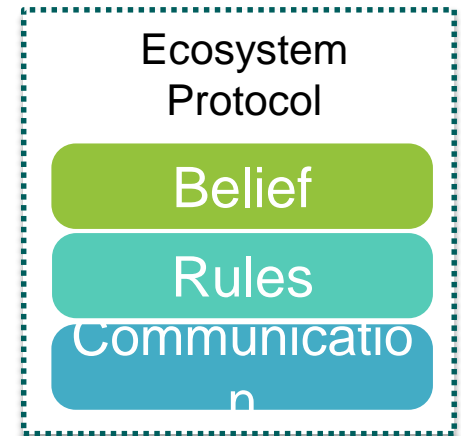


Data Governance



1. Who owns the data
2. Who may read it
3. Where is it
4. What is its fingerprint

Capabilities

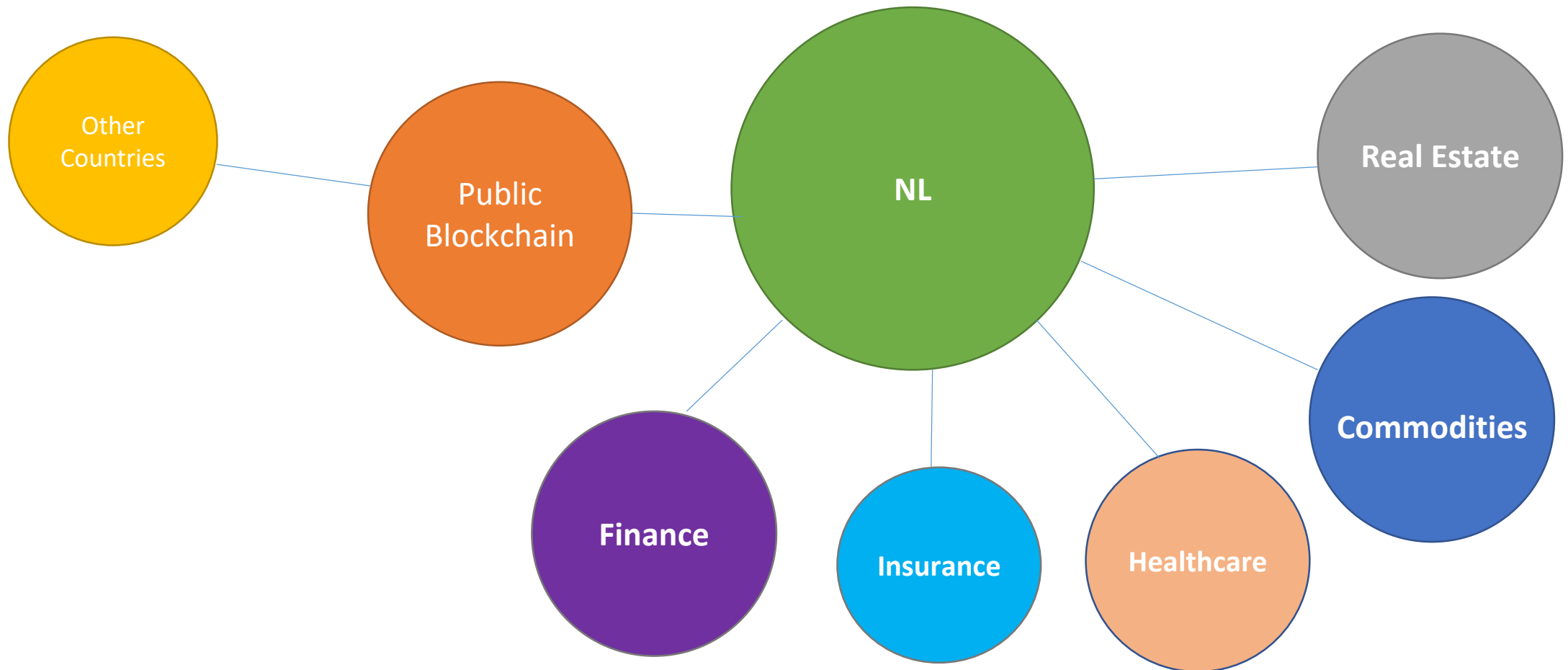


Biggest threats?

amazon



Future State



Now is the time

Only with ecosystems we will have



*I invite you to think with me
about the way we position our society
in this new world of ecosystems*

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linkedin: Tim Blankers

blog: timblankers.nl