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# Law and Borders: Self-Administered IDentifiers and NExTPats: NETizen eXpatriates

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**There are more people living inside  
this circle than outside of it**

# The Right to Work Online

Data Model:

Legal Identifiers with Legal Standing

- 1) Natural Persons (Privacy Constrained)
- 2) Legal Persons

other types( AI, IoT (50 billion), Smart Contracts)

Data Model:

Non-Lawful Identifiers (does not require the law for legitimacy)

**Netizen Expatriates (NETizen Expatriates)**

Displaced People

(Now 70 million: More than post WWII

Future: 700 million -> billion in a generation)

Internally Displaced Persons

Externally Displaced - Forced Migrants

Migrant Workers

# Scaling The Next Billion+: Sovereign Identifier Systems - India

- Aadhaar, 10 year old, 12 Digit Identifier
- Stats: [https://uidai.gov.in/aadhaar\\_dashboard/auth\\_trend.php](https://uidai.gov.in/aadhaar_dashboard/auth_trend.php)
  - <https://uidai.gov.in/>
  - <http://indiastack.org/>
- Supreme Court Constitutional Ruling:

“It is better to be unique than the best. Because, being the best makes you the number one, but being unique makes you the only one.” --

[26 Sept Supreme Court of India Judgement - Constitutionality](#)

# Scaling The Next Billion++

## Sovereign Identifier Systems - China

- 社會信用體系 - Social Credit System (Public Private Partnership)
- Real Name Electronic ID ( <http://eid.cn/> ) and CTID (CyberTrusted ID)
- Deployment Pathways: TechFin
  - Alibaba (AntFinancial - Technology Provider (Alipay)):
  - Tencent (WeChat Pay - WeiXin 800 million active users)
- Deployment Pathways: FinTech ( Traditional Banks - Union Pay)
- Common CLOUD and Carrier Services (Mobile)->
  - De-risking and Externalizing Costs associated with Identity Responsibility and Risk for Digital Generation (DiDs)
- Identities issued by the government to citizens for identifying identity online and offline
  - Bank Smart Card (Distributors)
  - SIMeID (Mobile)
- Hong Kong new e-ID Card: Deployment Starting this month (8 million)



## Soft Infrastructure for China's Belt and Road Initiative (BRI)

### Belt and Road Blockchain

Source: <http://beltandroad.hktdc.com/en/belt-and-road-basics>

EG. 90% By Sea

[Tradelens by Modern Terminal + Maersk + IBM](#)



# CHANGING ARCHITECTURE: Game Changer?



'Hong Kong' Barnyz CC-BY-NC-ND 2016

Change in

- 1) Market Structure,
- 2) Business Models and
- 3) Competitive Landscape

# WHAT ARE FUNDAMENTAL TENSIONS?



[‘Tension’ Domiriel CC-BY-NC 2012](#)



# Liberté, égalité, fraternité

?

Ice



WestPhalia  
1648

Bordered and Sovereign:  
Territoriality Principle  
No One Above The Law

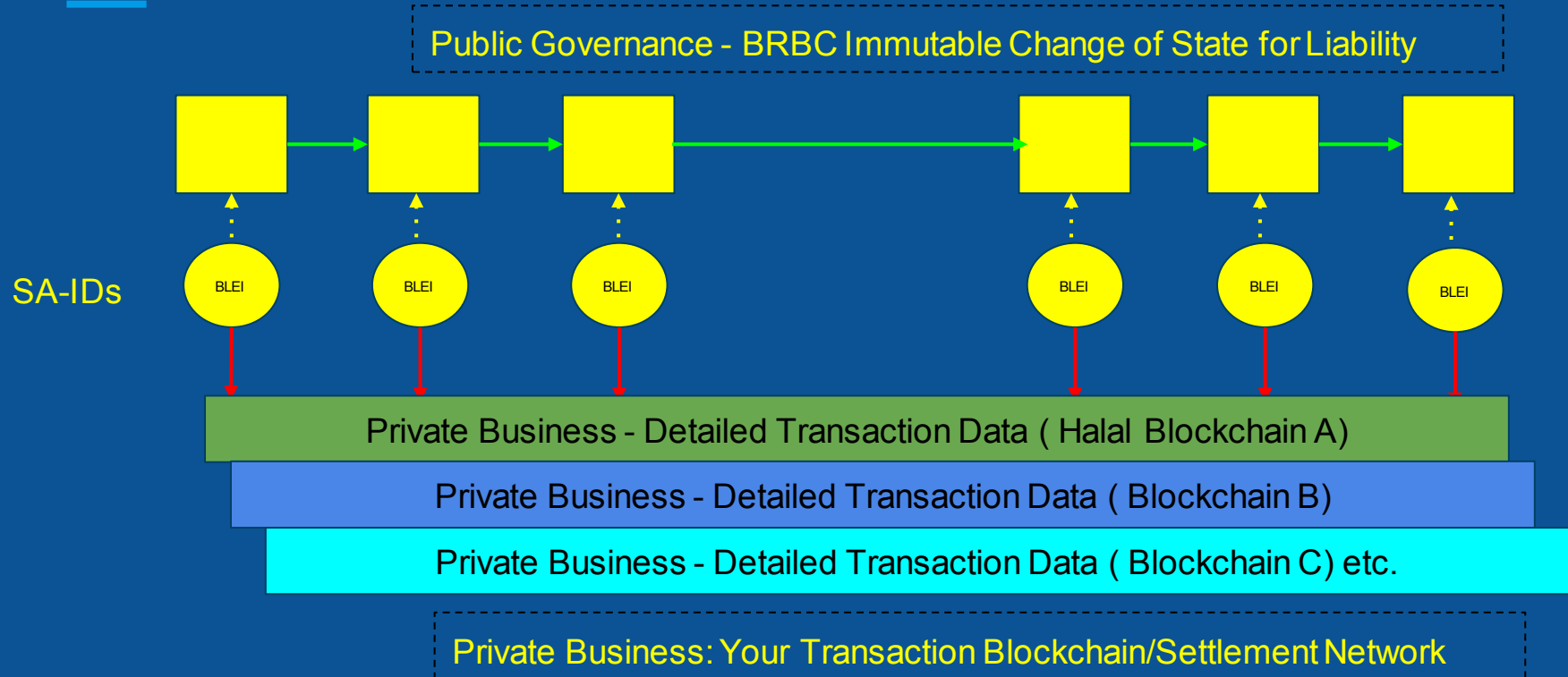
Fire



EastPhalia  
2047

Borderless and Self-  
Administered: 'Functionality  
Principle'  
No Nation Below Mathematics

# The Belt and Road Blockchain : Public Governance Private Business



# Hong Kong: Emerging Separation of Concerns

## 1) Public and Border Security: **Public Governance** ('Golden Source')

Legal Identifier, Accountability and Confidence (tangible physical border)

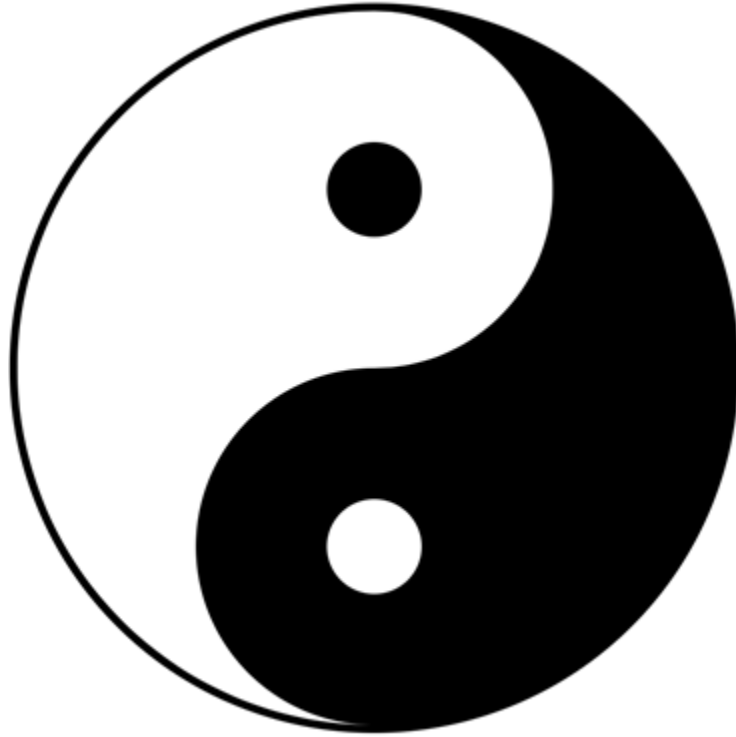
## 2) Commercial and Day-to-Day: **Private Business** ('Golden Copies')

Functional Identifier(may or may not necessary have PII),

Self-Administered Identifier (Cloud+Mobile)

Cryptographic Consistency and 'Confidistance' - (Intangible data border)

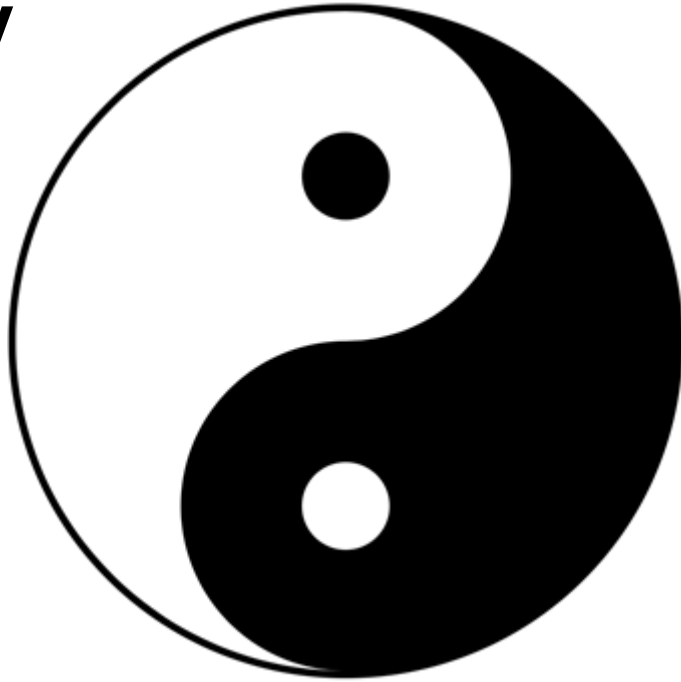
**Sovereign  
States:  
'Fire'  
Dynamic  
'Violence'**



**Borderless  
Communities:  
'Ice'  
Cryptographically  
Strong  
Static 'Violence'**

**Legal Certainty**

**“Rule of Law”**



**Cryptographic  
Consistency**

**“Rule of Code”**

[Eastphalia 2047: The Internet's New Legal Layer](#)

# Law and Borders: Lawful Legal Standing

Legal Person

Natural Person

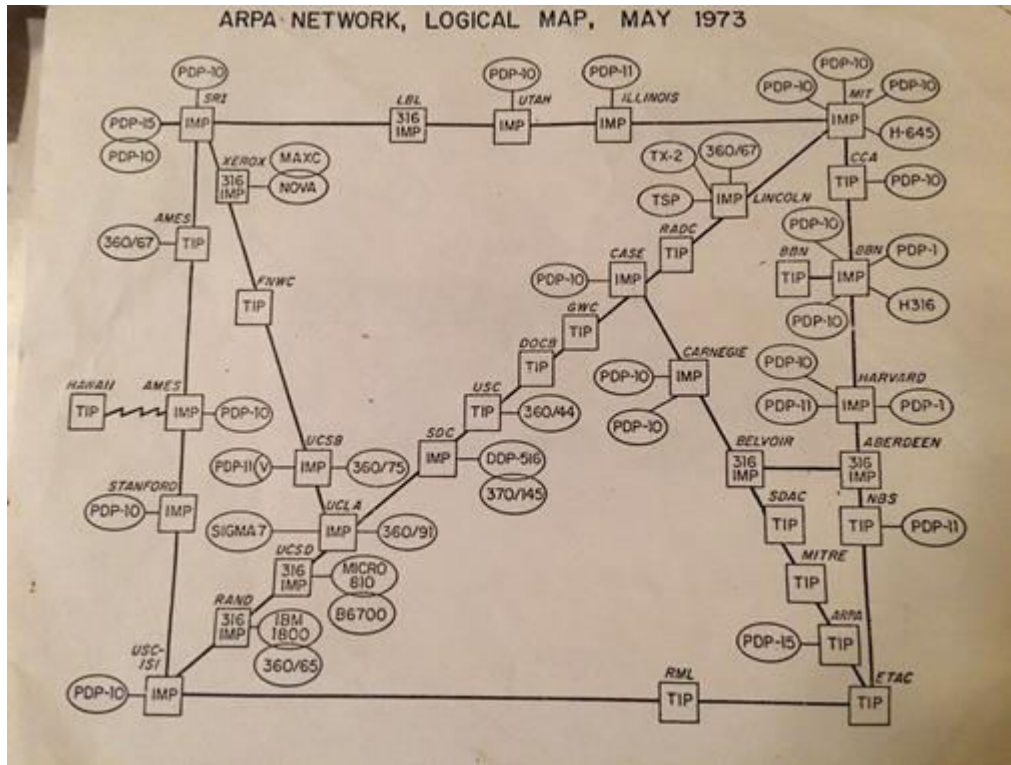
Algorithmic Liability ( Estonia 'Kratt' Law)

A different ordering principle?

Decentralized != Disorganised

Coordinate without Communicating





# The Post-Internet, Post-Bitcoin Era

# The Fundamental Assumptions ...

Distance  $\neq$  Cost

Centralized  $\neq$  Trusted

Time  $\neq$

Money

## Changing Architecture: PULL → PUSH



‘PUSH’ Daremoshiranai CC-BY-NC 2014    Analog Supply Chains -> Digital Demand Chains

# Digitizing Global Trade



**ICE: 23/11**

Black Friday ->  
Cyber Monday

USD 7.8 Billion?

**FIRE: 11/11**

Singles Day

USD 30 Billion?

FIRE

改善

Kaizen: Japanese (Change for Better)

Predictable Incremental Improvements over  
Time -> Incremental Efficiency  
Low Risk

ICE



Unpredictable Breakthrough Improvement  
Proposals -> Massive Efficiency and Massive Risk  
<http://tw.tartoo.com/self-breakthrough.html>



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# **Fire and Ice**

## **Poem by Robert Frost ( 1874-1963)**

Some say the world will end in fire,  
Some say in ice.  
From what I've tasted of desire  
I hold with those who favor fire.  
But if it had to perish twice,  
I think I know enough of hate  
To know that for destruction ice  
Is also great  
And would suffice

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**ConfiDistance**

**Selective Transparency**

**Don't Trust Verify**

# End References

a) Making Trade Wars Obsolete

<https://www.coindesk.com/blockchains-killer-app-making-trade-wars-obsolete/>

a) CES 2018 - [HK Belt and Road Blockchain Consortium](#)

[https://www.youtube.com/watch?time\\_continue=9&v=L7CuuLYi0Ik](https://www.youtube.com/watch?time_continue=9&v=L7CuuLYi0Ik)

a) Berlin T20/G20 Process 2017

<https://youtu.be/e7Pq6WQuVTQ?t=27637>