

Layered Architecture and Data Ownership

July 28,2016

Taipei, Taiwan

Dr. Makoto (Mac) Yokozawa, Kyoto University http://yokozawa.mois.asia/

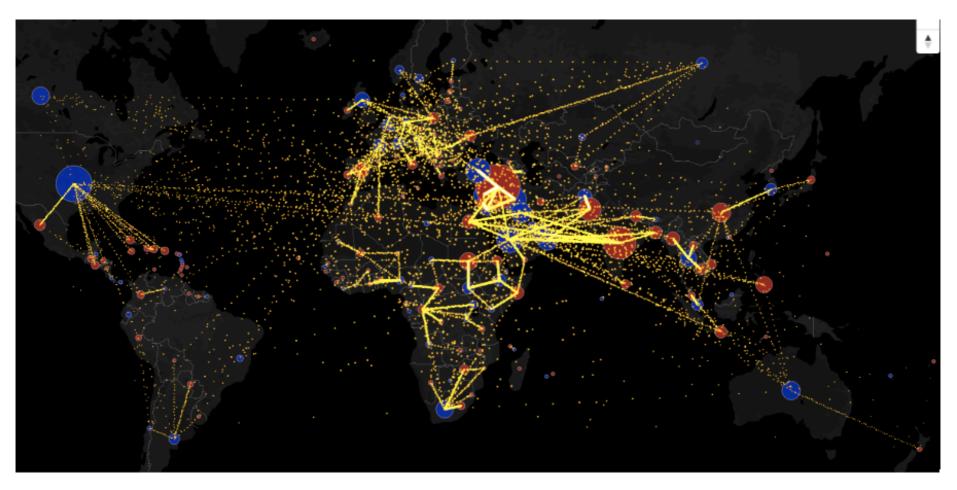
http://www.soc.i.kyotou.ac.jp/en/divisions/social info network/market and organizational informati on systems/

#whois mois.asia

Domain ID:D787490-ASIA Domain Name:MOIS.ASIA Domain Create Date:01-May-2008 14:56:52 UTC Domain Expiration Date:01-May-2017 14:56:52 UTC Domain Last Updated Date:25-Apr-2016 10:46:20 UTC Registrant Name:Mac Yokozawa Registrant Organization:MOIS LABORATORY Registrant Organization:MOIS LABORATORY Registrant Address:Yoshidahoncho Registrant City:Kyoto Registrant State/Province:Kyoto Registrant State/Province:Kyoto Registrant Postal Code:6068501 Registrant Phone:+81.16506532501 Registrant E-mail:m-yokozawa@i.kyoto-u.ac.jp

Freedom of movement

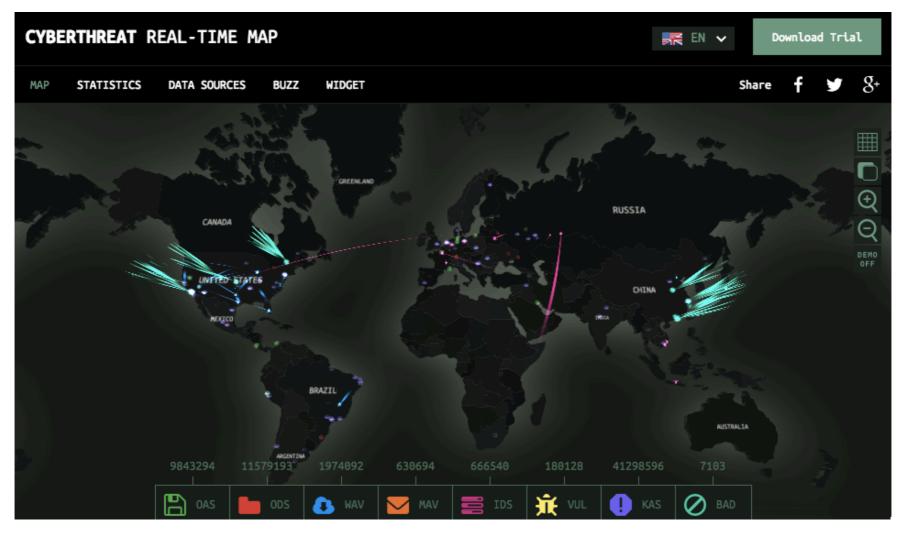
Country-to-country net migration (2010-2015)



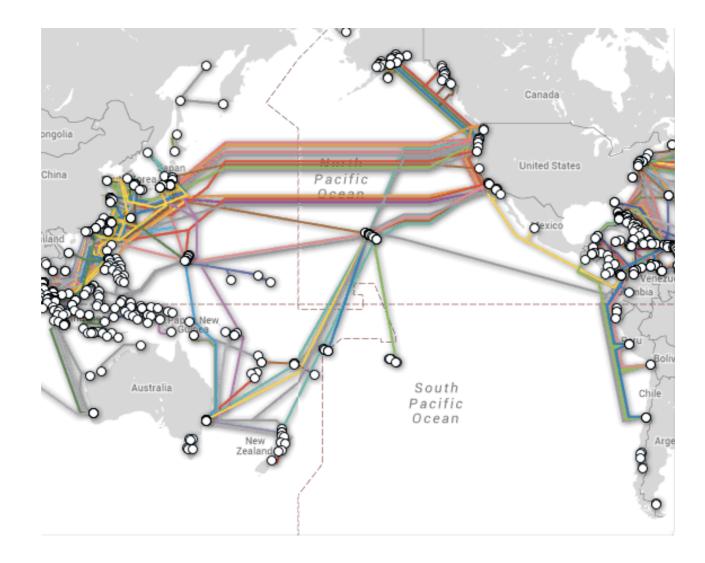
http://metrocosm.com/global-immigration-map/

Freedom of safe use

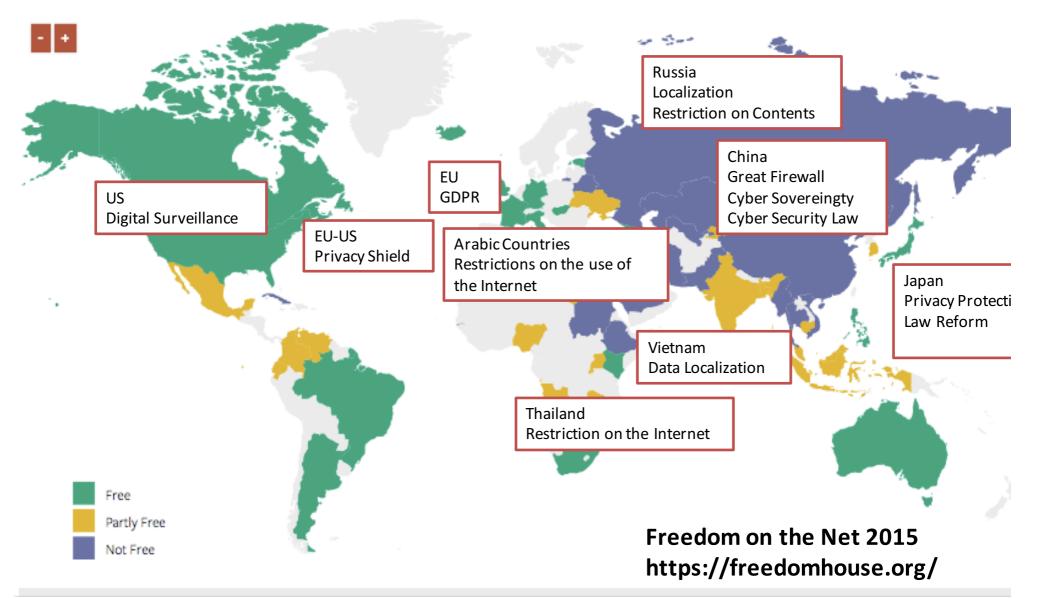
https://cybermap.kaspersky.com/



Pacific Network Architecture



Unharmonized policies for Digital Traders



Copyright MOIS Research Unit, Kyoto Univ. 2016

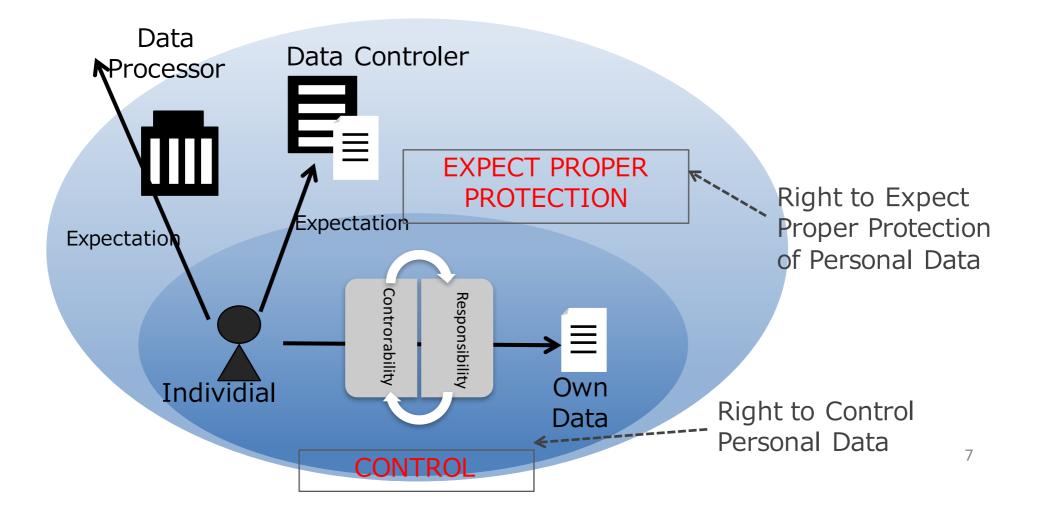
Right to own your own data.

- Who owns your personal data matters.
 - Is that your Internet provider, bank, mobile phone operator, eCommerce provider, government or yourself?
 - My photo taken by my friend Who is the owner?
 - Anonymized health record of my disease in hospital, who is the owner?
- Fundamental structure of digital economy

Who is your trustable partner of ownership?

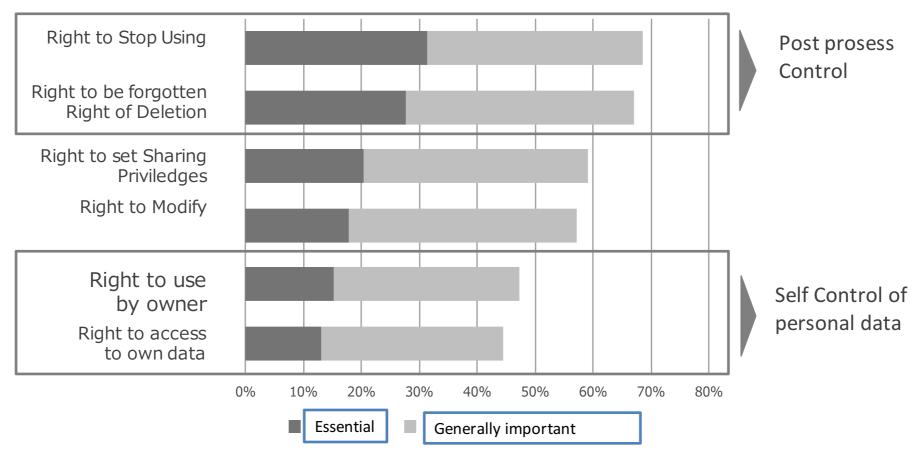
- Data Brokers?
- Government?
- Bank?
- Cloud Service Providers?
- orNone?

Data Ownership Trust Architecture



Expectation of Human Rights in Data Ownership

必要だと思うコントロールの内容



APEC/Cross Border Privacy Rules

http://www.cbprs.org/

The APEC Cross Border Privacy Rules (CBPR) system, endorsed by APEC Leaders in 2011, is a voluntary accountability-based system to facilitate privacy-respecting data flows among APEC economies. It has four main components:

- 1. recognition criteria for organisations wishing to become an APEC CBPR system certified Accountability Agent;
- 2. an intake questionnaire for organisations that wish to be certified as APEC CBPR system compliant by a third-party CBPR system certified Accountability Agent;
- 3. assessment criteria for use by APEC CBPR system certified Accountability Agents when reviewing an organisation's answers to the intake questionnaire; and
- 4. a regulatory cooperative arrangement (the CPEA) to ensure that each of the APEC CBPR system program requirements can be enforced by participating APEC economies.

