



Government in the age of the "Social Machine"

2014 Solomon Lecture





Where is the knowledge we have lost in information?

1714 - the Longitude Act







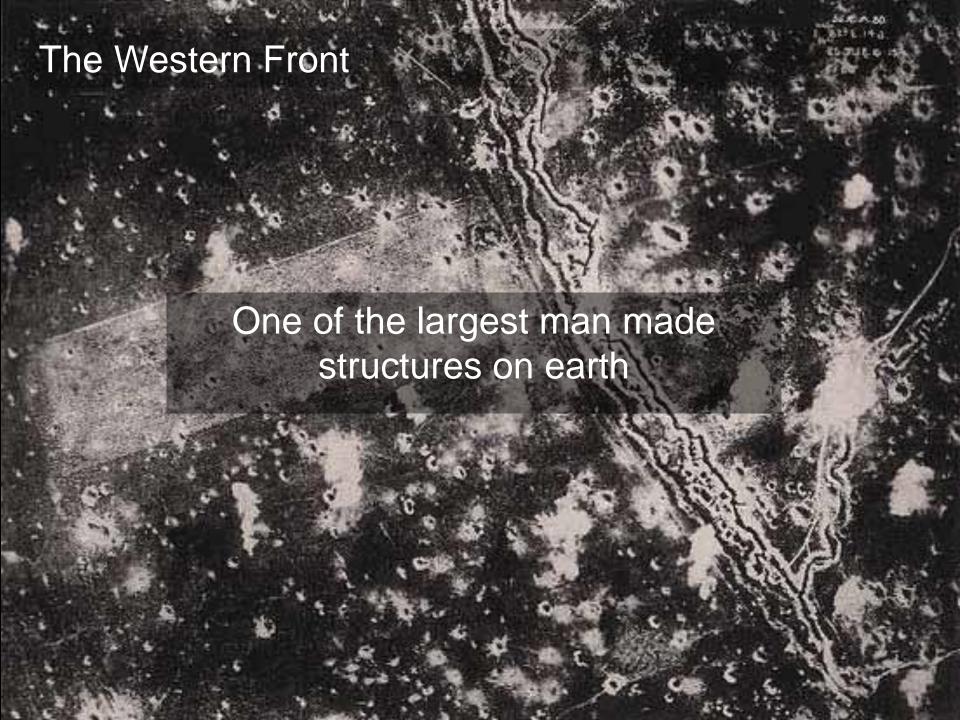
1814 - Australia's first official currency





1914 – Commencement of WW1





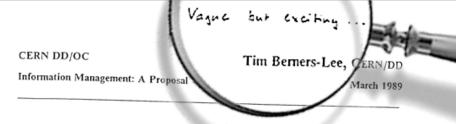
1914 - The birth of ANZAC







1989 -Information Management: A proposal

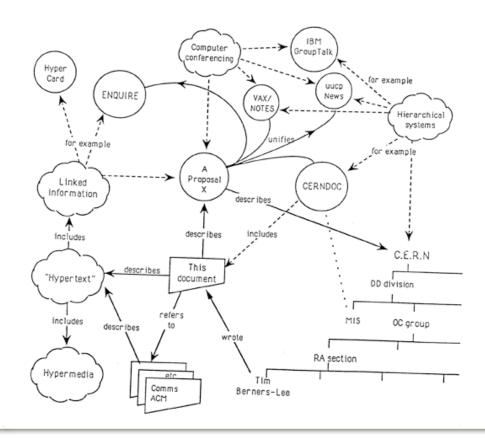


Information Management: A Proposal

Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext system.

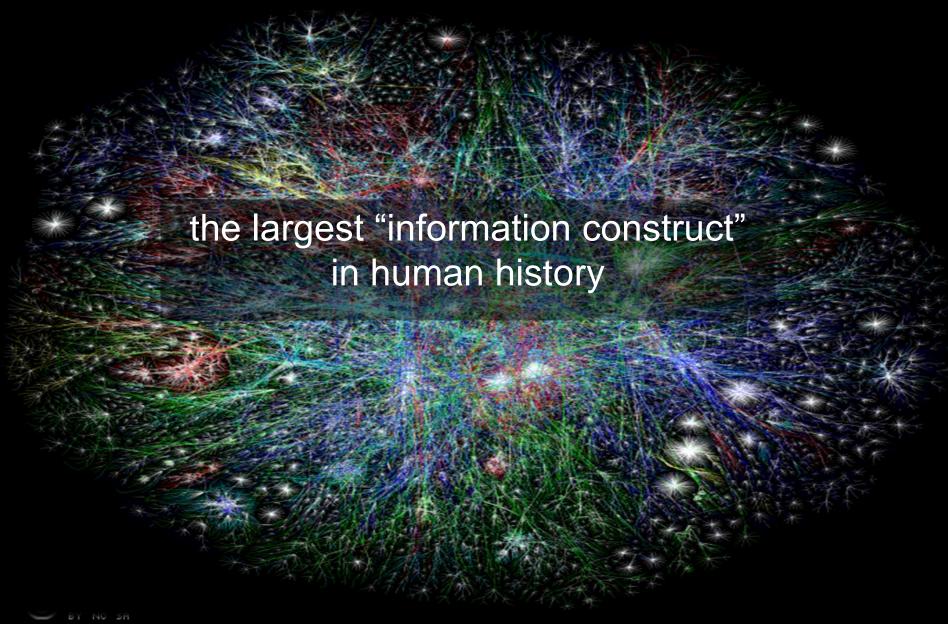
Keywords: Hypertext, Computer conferencing, Document retrieval, Information management, Project control





1989 – birth of the World Wide Web



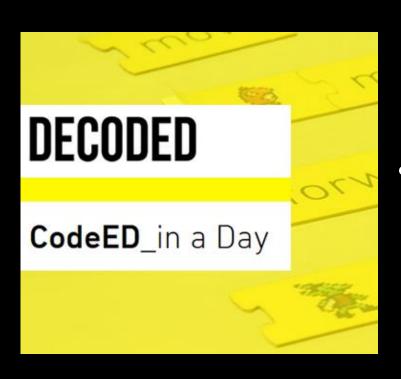


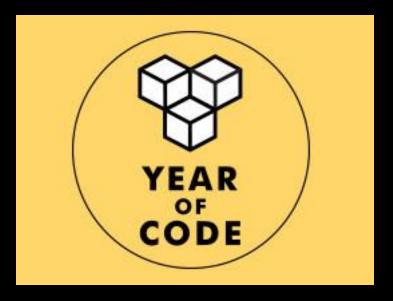


2014 - Teaching coding in schools



 By September coding will be mandatory in British schools





 The UK government has ordered coding become compulsory for every child aged 5-16 years old

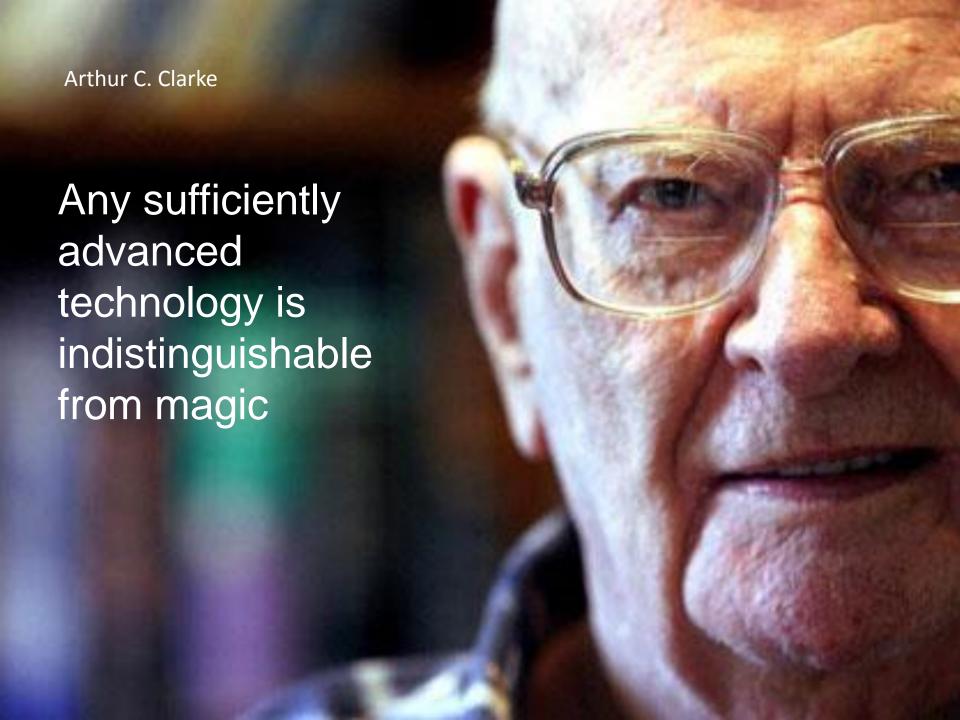




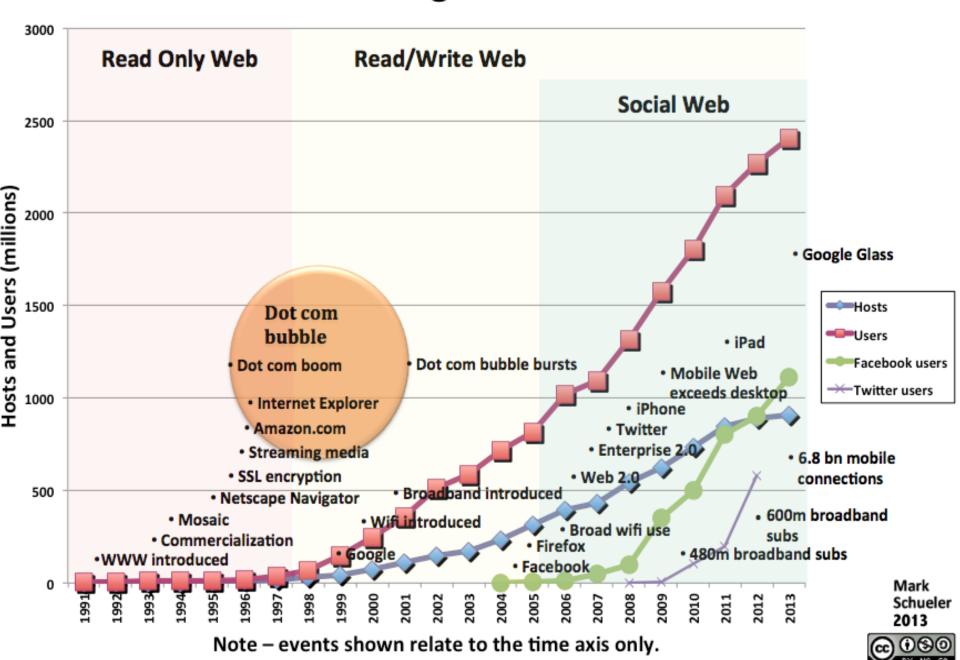
ALL IS INFORMATION ...

- as navigation and survival
- as currency
- as power and conflict
- as a way to connect
- as empowerment
- as a fundamental literacy





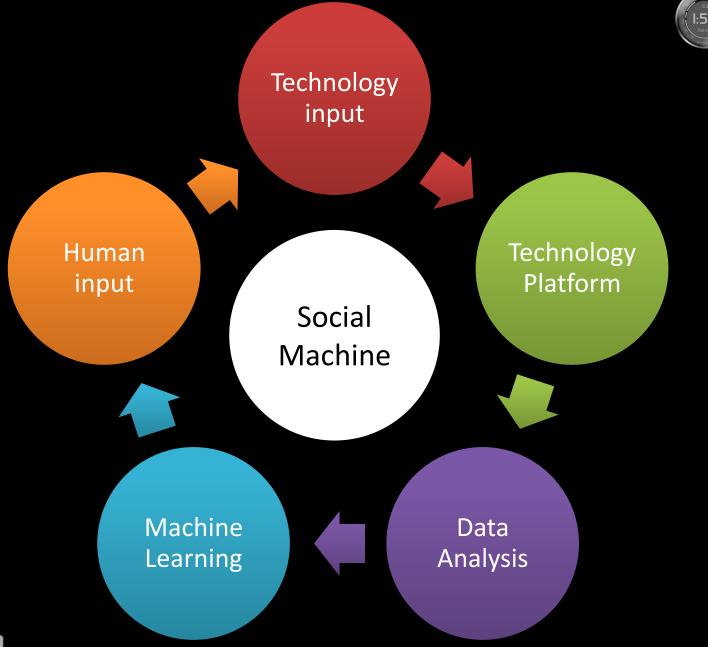
Internet Growth - Usage Phases - Tech Events





Real life is, and must be, full of all kinds of social constraint – the very processes from which society arises. Computers can help if we use them to create abstract social machines on the Web: processes in which the people do the creative work and the machine does the administration. ... The stage is set for an evolutionary growth of new social engines

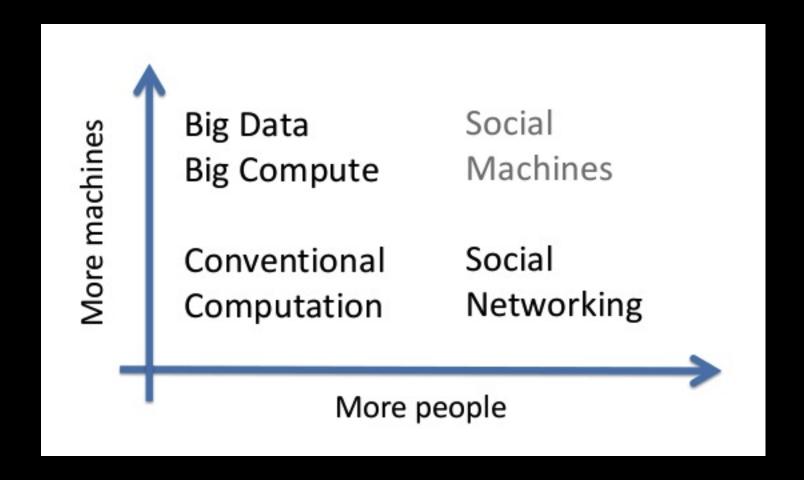






The rise of the Social Machine







Characteristics of the social machine



- "Nobody knows everything, but everyone knows something"
- 1. problems are beginning to be solved by very large scale human participation via the Web
- 2. there is access to, or the ability to generate, large amounts of relevant data using open data standards
- 3. there is increasing confidence in the quality of the data, and
- 4. human-computer interfaces are becoming far more intuitive and seamless



Early social machines

























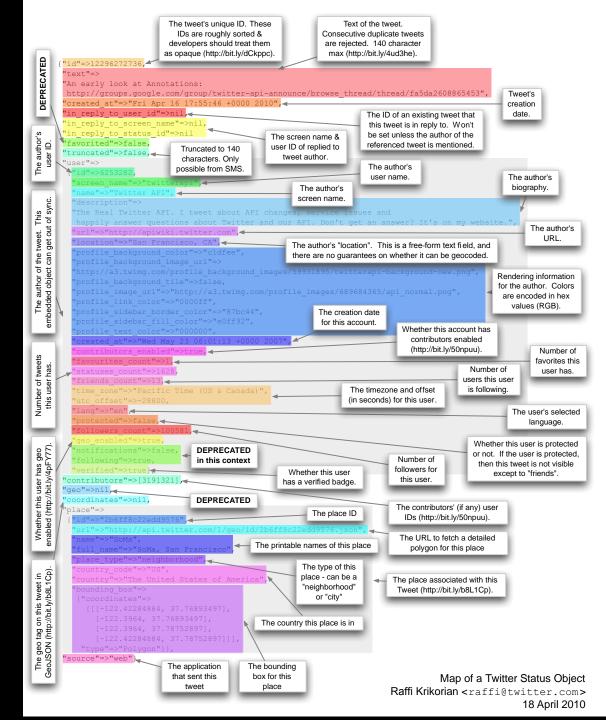








The common Tweet





We are data





BIG DATA

OPEN GOVT

1. Non-public data for marketing, business analysis, national security

3. Large
datasets
from scientific
research, social
media, or
other nongovt. sources

6.Large public government datasets (eg weather, GPS, Census, SEC, health care)

4. Public data from state, local, federal govt. (eg budget data)

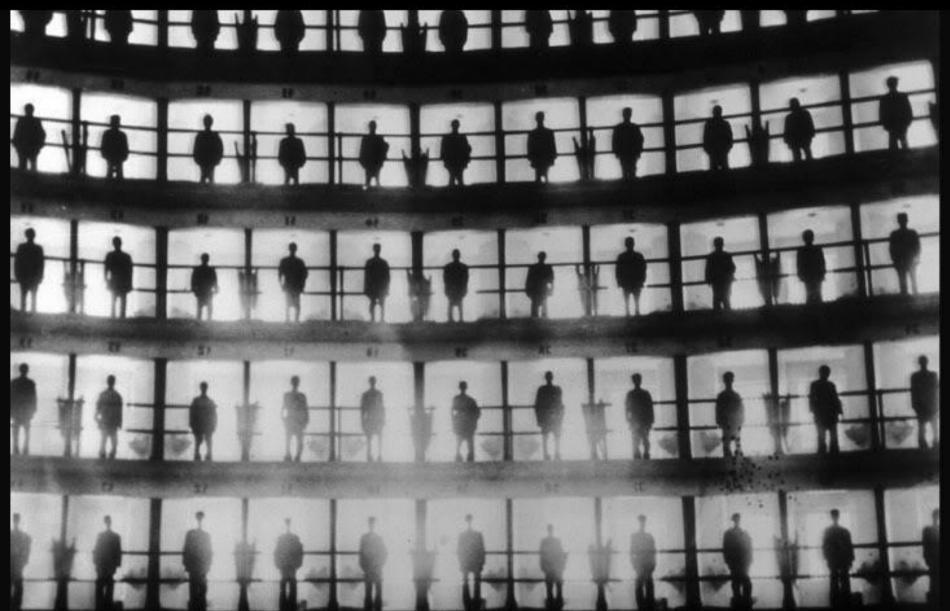
2. Citizen engagement programs not based on data (eg petition websites)

 Business reporting (eg ESG data); other business data (eg consumer complaints)

OPEN DATA

Welcome to life in the panopticon





Web Science

The theory and practice of social machines



An emerging discipline which aims to understand the deeper structure of the social Web and how people are using it, not only now, but potentially in the future.









Web Science: Components

Computer Science

- Computability
- De-centralised Information
 - Systems
 - · Semantic Web
 - Linked Data

Engineering A.

- Protocols
 - Architectures

Web

- Accessibility
 Security
- · Resilience.

Sociology

Social attitudes

· Theory of groups

Social networks

· Plume Tracing ...

Artificial Intelligence

- · Knowledge Representation
 - Languages .
 - Inference
 - Agent Based Computing...

Socio-cultural

alues, attitudes and lifestyles: fast

- Mently."
- Anti-corporate

 'Open source' values
- New trust matrix: NGOs
- Ethical consumers
- 7 · Demography
- Fragmented public media and

Law

· Intellectual Property

EU/regulatory drivers

. Public engage vs indifferen

Corporate social responsibility.

- discourse
- Journalism
- Single issue moral panics
 - · Smart mobs
- Mobile opinion formers...

Political Science

•Governance Democratic mechanism

Physics

Mathematics

. Theory of Graphs

Game Theory...

Networks

Statistics

- Statistical Mechanics
- Phase Transitions...
 - Devehol.

Psychology

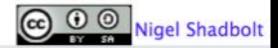
- Social attitudes...
- Cognitive properties
- · Human Information
 - ... Processing
- Experimental Methods

Biology

- Evolutionary dynamics
 Systems biology
 - · Systems biology · · · Plasticity...

Ecology

- · Structure of ecosystems
- Ecosystem Productivity
- · Population Dynamics
- Digital Biosphere...



Economics

. Theory of Markets

· Macro and Micro economic

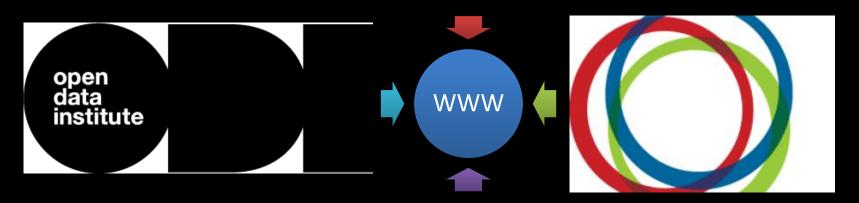
: Auction models

Types of capital.

The Web Science community











www.sociam.org





Purposeful Human Interaction on the Web

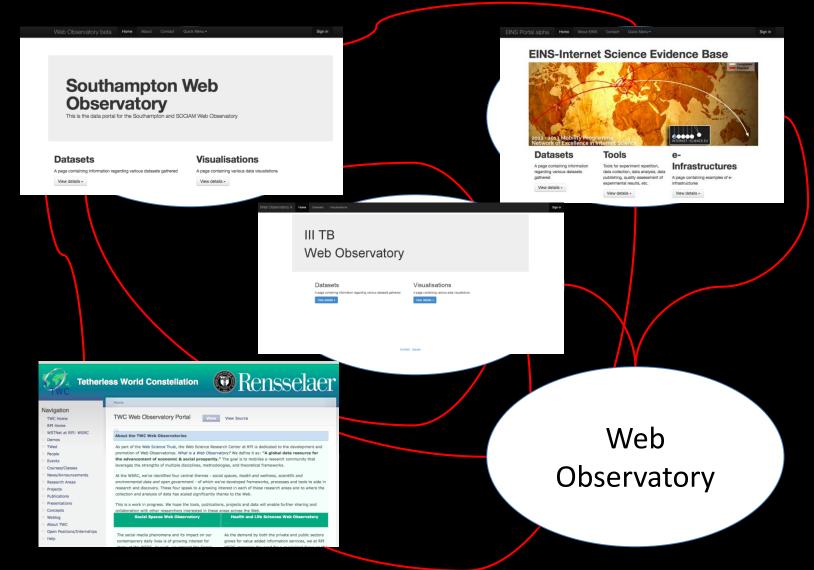
Research into methods of supporting purposeful human interaction on the Web. Read more



The Web of Observatories to understand web evolution through observation experimentation Thanassis Tiropanis – University of Southampton

The Web of Observatories

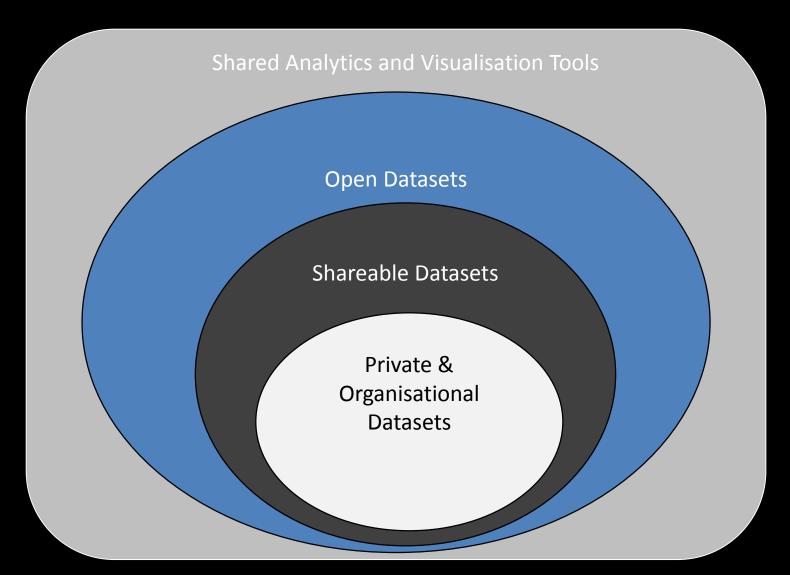






Levels of Sharing









What if data were a person?
What if we designed for data the way we design for people?



Governments need information to govern

Citizens need information to hold government to account

Brendan O'Connor OAIC Conference, November 2011

Government is, at bottom, a mechanism for collective action. Government 2.0 is the use of technology ... to better solve collective problems at a city, state, national, and international level



Welcome to GOV.UK

The best place to find government services and information Simpler, clearer, faster

Search GOV.UK

q

Popular on GOV.UK

Universal Jobmatch job search

Get a car tax disc

Log in to student finance

Book your theory test

Employment and Support Allowance

Services and information

Benefits

Includes tax credits, eligibility and appeals

Births, deaths, marriages and care

Parenting, civil partnerships, divorce and Lasting Power of Attorney

Business and self-employed

Tools and guidance for businesses

Citizenship and living in the UK

Voting, community participation, life in the UK, international projects

Crime, justice and the law

Legal processes, courts and the police

Disabled people

Includes carers, your rights, benefits and the Equality Act

Driving and transport

Includes car tax, MOT and driving licences

Education and learning

Includes student loans and admissions

Employing people

Includes pay, contracts and hiring

Environment and countryside

Includes flooding, recycling and wildlife

This website replaces



Housing and local services

Owning or renting and council services

Money and tax

Includes debt and Self Assessment

Passports, travel and living abroad

Includes renewing passports and travel advice by country

Visas and immigration

Visas, asylum and sponsorship

Working, jobs and pensions

Includes holidays and finding a job



Data Indonesia dalam satu portal

Temukan data-data berbagai sektor instansi pemerintahan yang dapat anda gunakan secara bebas

Cari Data, Tema, Instansi...

Cari

TOPIK



Ekonomi dan Keuangan



Pendidikan



Kependudukan dan Ketenagakerjaan



Energi dan Sumber Daya Alam



Kesehatan



Pengadaan

Blog

Open Data: Potential Source for National Empowerment >>

Laporan Implementasi Gerakan Open Government Indonesia 2013 >>>

Featured

Bank Indonesia

Belanja Pemerintah Indonesia Berdasarkan APBN

Pemerintah Kabupaten Bojonegoro: 117 Dataset

Statistik

700 dataset 24 instansi 14 grup







For Queenslanders

Business and industry

Contact us

Search website

Q

View all



Queensland Government home

Search

Search website e.g. holidays

Q

?

Popular questions

I want to...

Find a department

Renew my registration—vehicle and vessel

Renew my driver licence

Register my pool or spa

Change my address—driver licence

Apply for a Seniors Card

Get a camping permit

Pay a camera-detected infringement notice

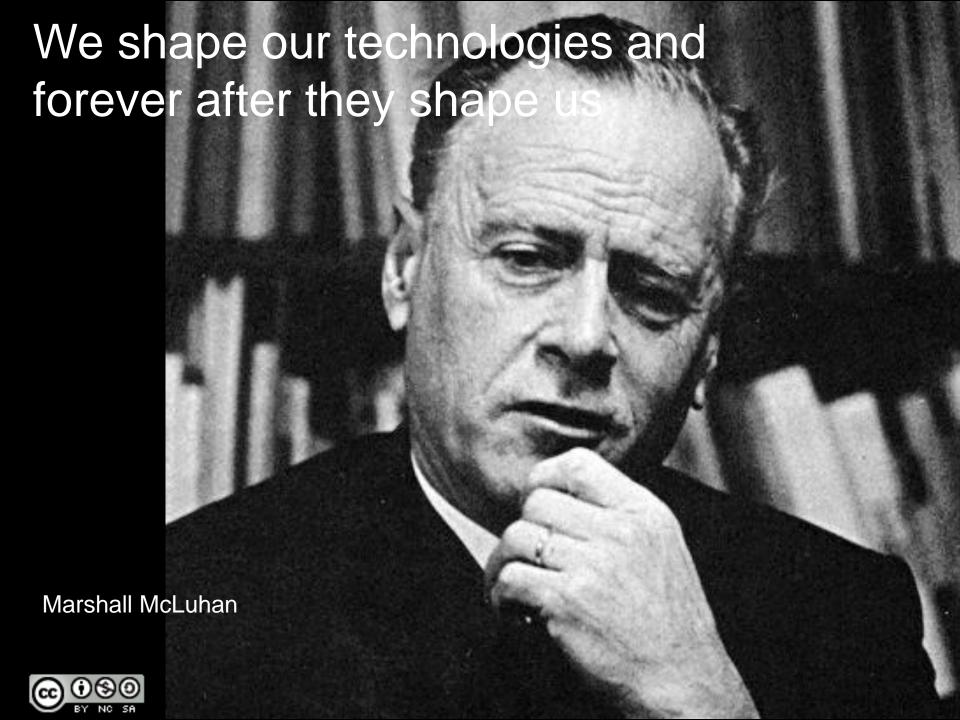
Search for grants

Search for government jobs and careers

Find Queensland Government gazettes

Find government data

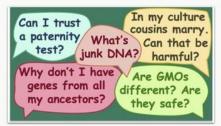






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Useful Genetics Part 2

The University of British Columbia, Jan 3rd Taught in English





Drugs and the Brain

California Institute of Technology, Jan 4th Taught in English





Information Theory

The Chinese University of Hong Kong, Jan 6th Taught in English





https://www.casseroleclub.com/





HOW IT WORKS

SIGN IN

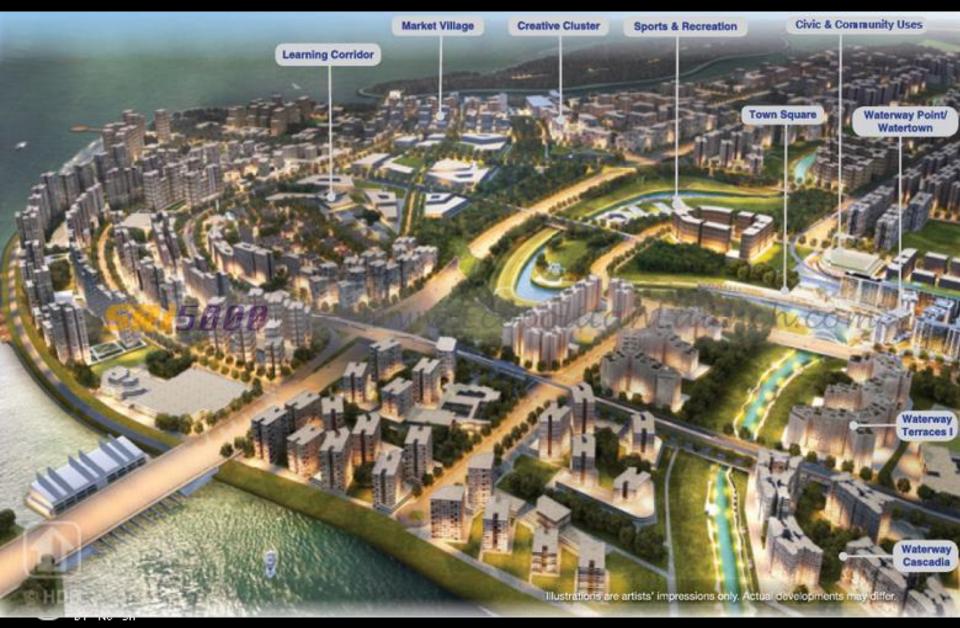
Home-cooked food made by neighbours for neighbours.





Punggol Northshore district, Singapore





A Government Web Observatory



Research Questions

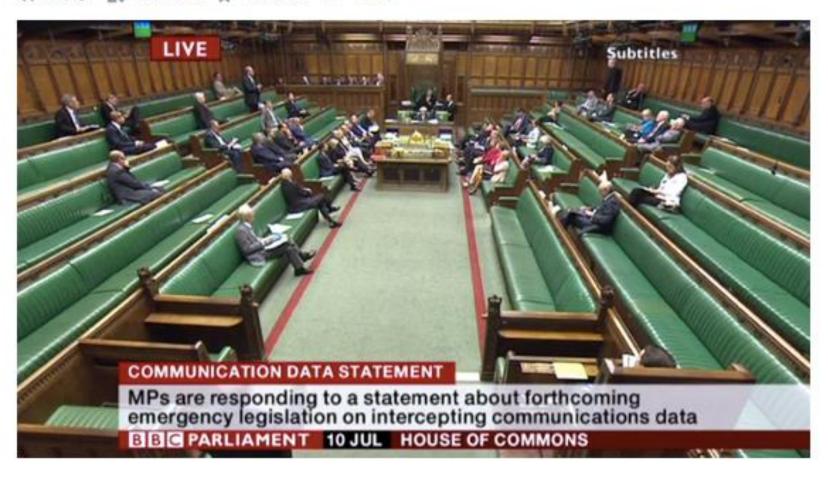
- 1. How do we build a "social machine" to better observe the workings of government?
- 2. How can this Government Web Observatory better inform the creation of public policy?
- 3. What are some of the key challenges which governments will face as a result of being armed with a Web Observatory?

Building a Social Machine in order to observe the Social Machine" of government in action



Oh, ICYMI, this is how many people were discussing the data retention bill allowing govt to retain all your metadata pic.twitter.com/q7jUIESWK4

Reply Retweet * Favorite ... More





Functional Skills

E-safety

Creativity

Effective communication

Digital Literacy

Critical thinking and evaluation

The ability to find and select information

Cultural and social understanding

Collaboration





A revolution doesn't happen when a society adopts new tools, it happens when a society adopts new behaviours

Is this the new emerging currency?







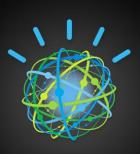
Is this the ultimate "social machine"?





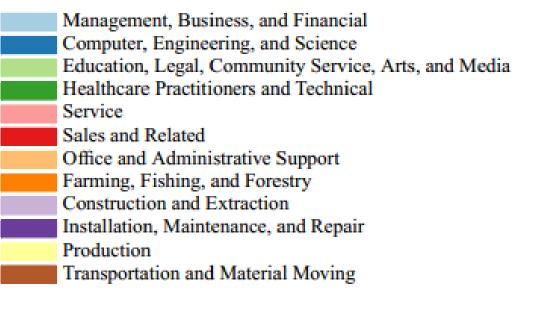


Or perhaps this?



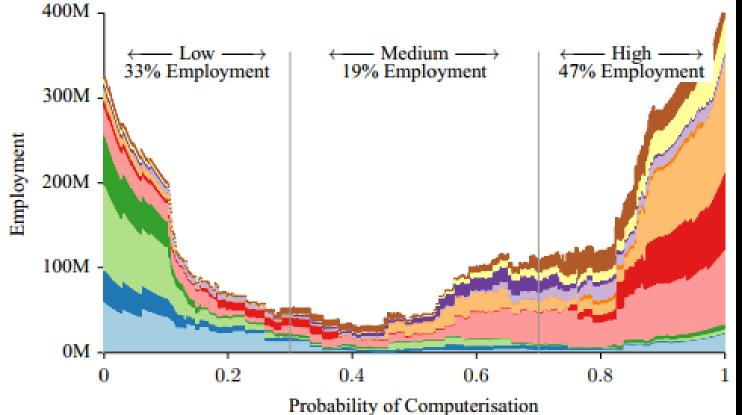


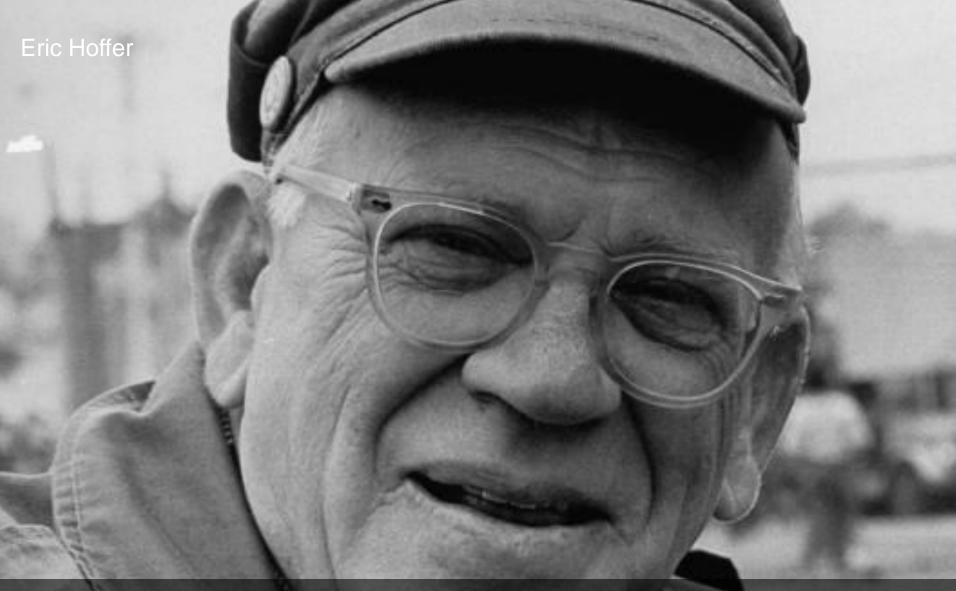






Jobs for Watson?





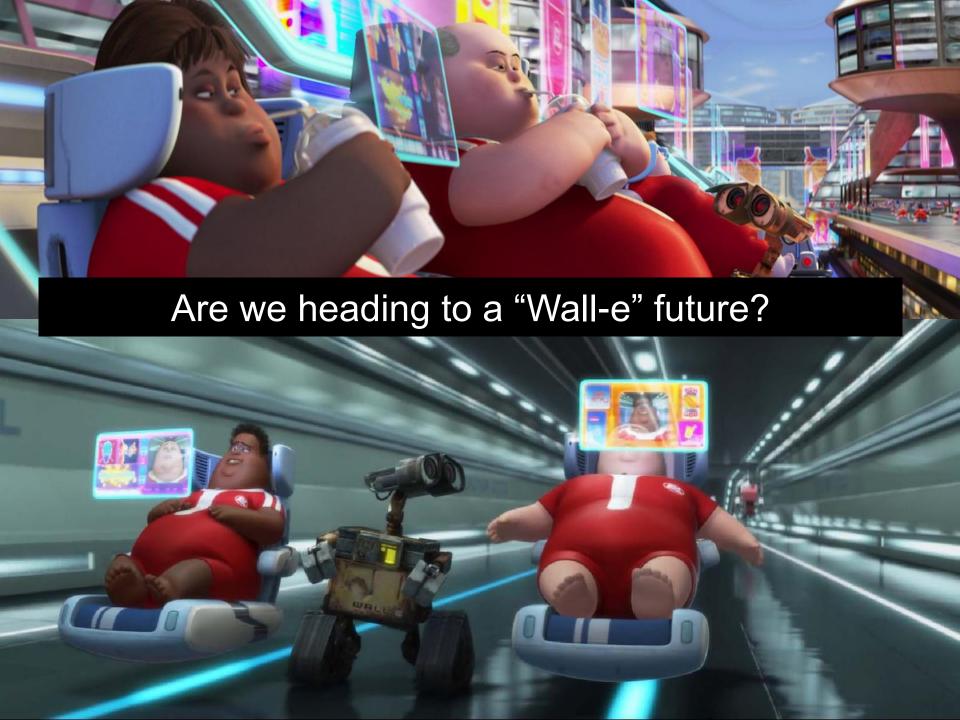
In a time of drastic change it is the learners who inherit the future. The learned usually find themselves beautifully equipped to live in a world that no longer exists

A driving future (or present)?

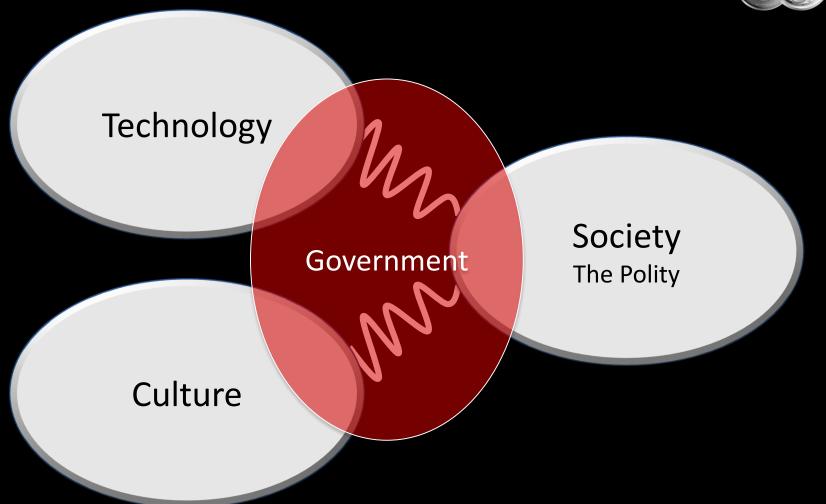








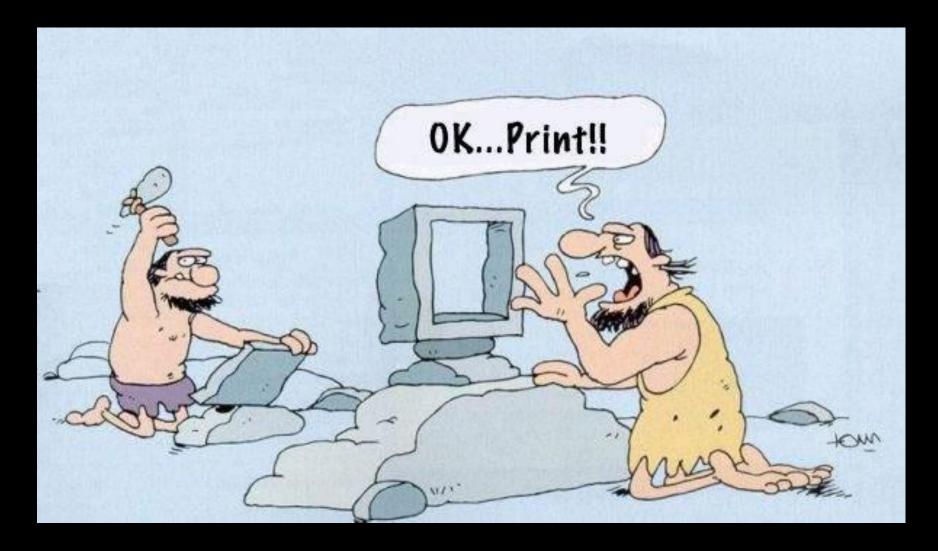






We are still cavemen in the digital world









Thank you

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