



**BIG
INNOVATION
CENTRE**

Be the Disrupter and Not the Disrupted

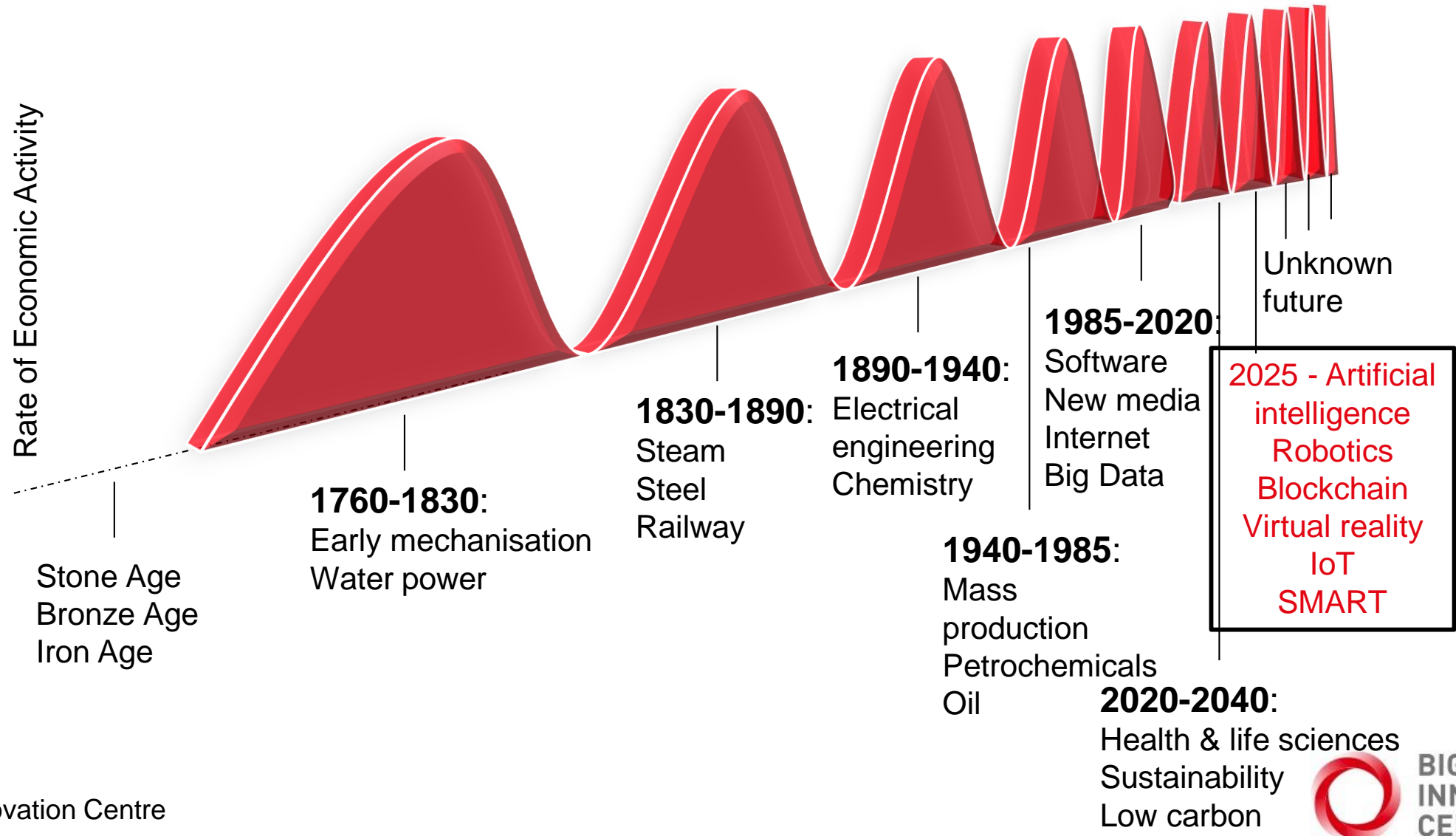
A Necessity or a Tall Order for the Public Sector?



BirgitteBIC

Professor Birgitte Andersen – CEO
Twitter: BirgitteBIC

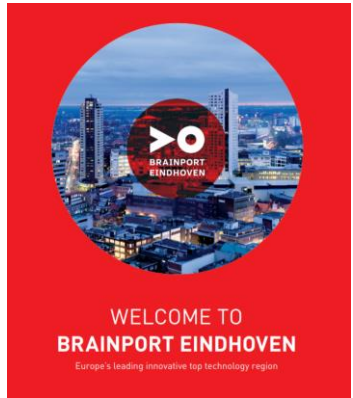
New technological, business and economic opportunities



How to disrupt?

Global growth hubs at scale:

About innovation and ecosystems interconnections



\$500 billion NEOM City

NEOM MEGA CITY PROJECT
A \$500bn project which 70% of the world population can reach within 8 hours

INVESTMENT SECTORS	TECHNOLOGIES
Human civilization	Automated driving and passenger drones
Energy and water	Novel food growing and processing practices
Mobility	Repetitive and arduous tasks automated and handled by robots
Biotech	All services and processes are 100% automated
Food	Free world class online education
Media	Wireless high speed internet
Entertainment	Full scale e-governance
Artificial intelligence, virtual reality and augmented reality technologies	City powered by renewable energy

WELCOME TO NEOM
The world's most ambitious project: an entire new land, purpose-built for a new way of living



An Innovation Ecosystem ready for disruption



Creative disruption:

- Attract **visibility of sectors**
- Attract **technologies and capabilities**
- Attract **investment and investors**
- Attract **trade** and commerce
- Attract **talent**
- Add real **value in decision making** for business leaders and policy makers

<https://www.innovationeye.com/>

AI in UK

ARTIFICIAL INTELLIGENCE INDUSTRY
LANDSCAPE OVERVIEW Q3 / 2018

TECHNOLOGIES, COMPANIES, INVESTORS, TRENDS



In dialogue with the All Party Parliamentary Group on Artificial Intelligence



www.biginnovationcentre.com
www.dka.global
www.apgp.org



Marketing and Advertising



Security



Entertainment



600 - AI Investors



AI in UK INVESTORS Q3 2018



GovTech



Healthcare



Transport & Infrastructure



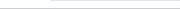
InsurTech



1000 AI Companies



Predictive Analytics



Consulting & Outsourcing



Machine Learning



Computer Vision



AI in UK Technology Landscape 2018



Chatbots & AI assistants



Robotic



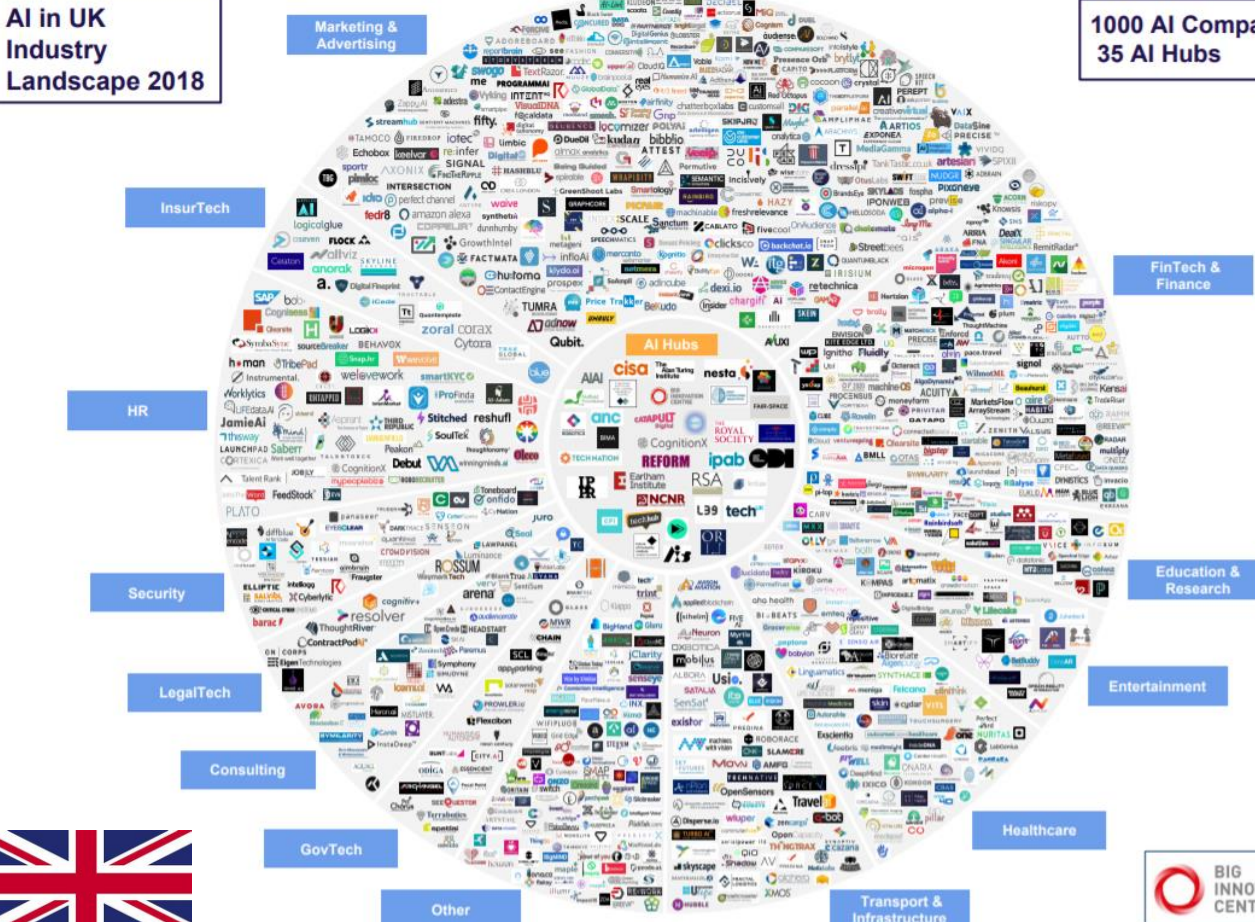
Other



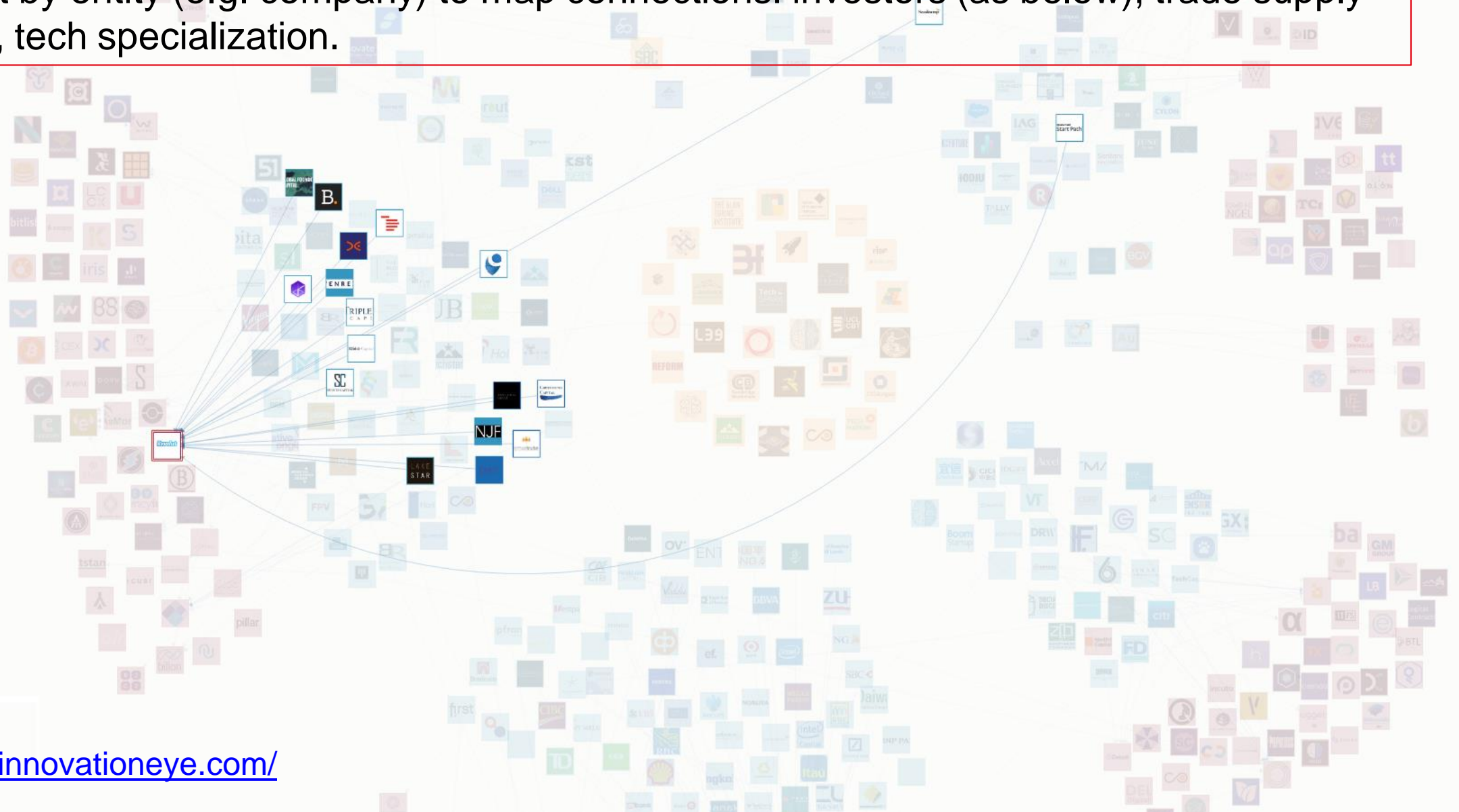
Intelligent Data Analysis



AI in UK Industry Landscape 2018

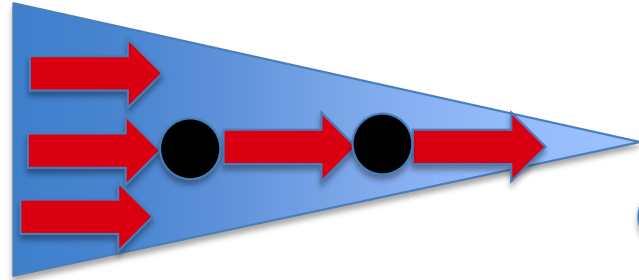


Select by entity (e.g. company) to map connections: investors (as below), trade supply chain, tech specialization.



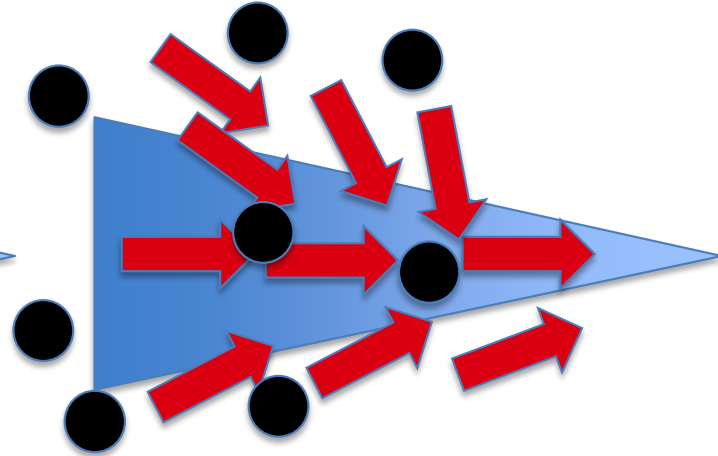
<https://www.innovationeye.com/>

Public sector approach towards co-creation



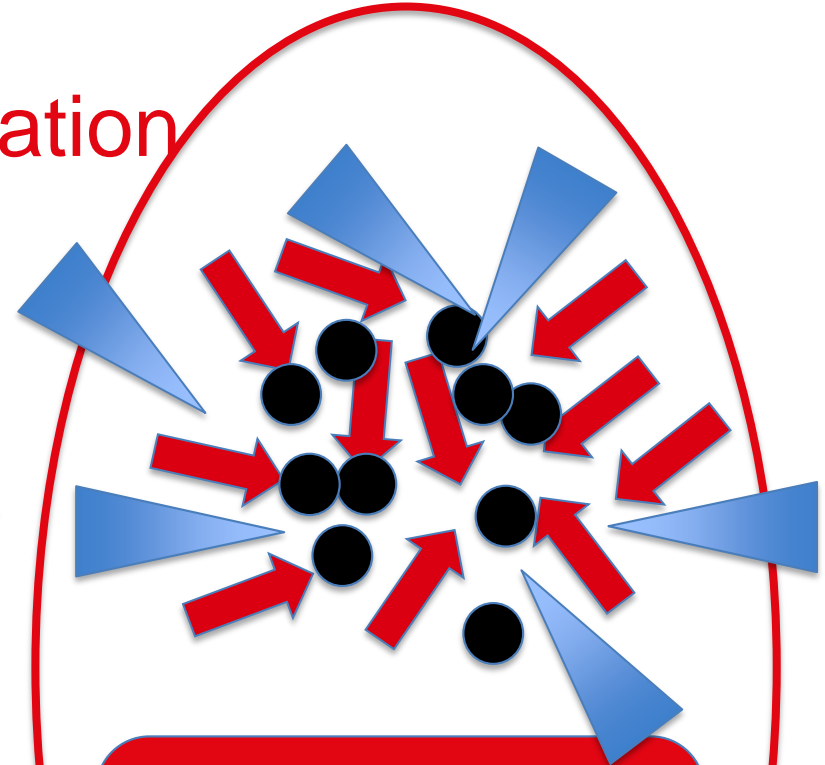
Closed Innovation

Up to 1990



Self-centric
Open Innovation
1:0

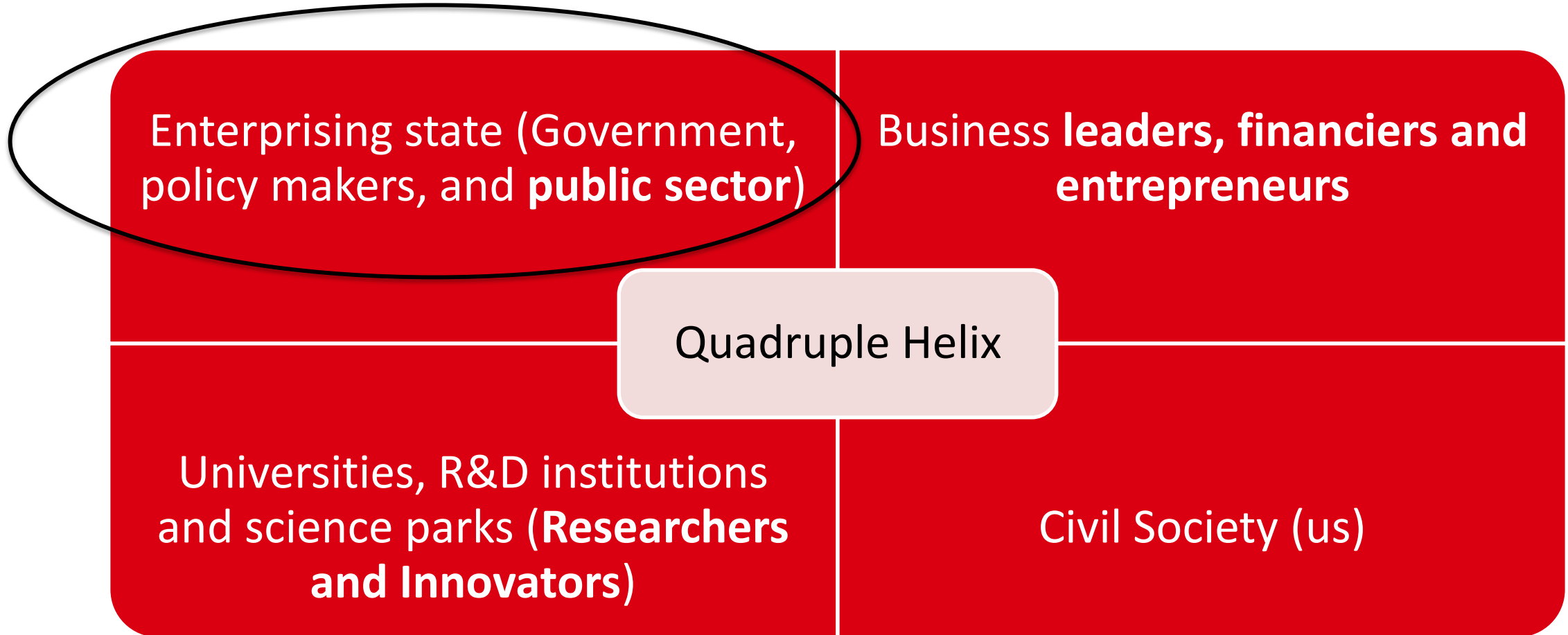
1990 - 2010



Ecosystem-centric
Open Innovation
2:0

New trend:
solving shared challenges

Users and co-producers of the innovation ecosystem





All Party Parliamentary Group on
Artificial Intelligence

THOUGHT LEADERSHIP & TASKFORCES IN UK PARLIAMENT



All Party Parliamentary Group on Blockchain



THOUGHT LEADERSHIP & TASKFORCES IN BIG INNOVATION CENTRE





**BIG
INNOVATION
CENTRE**

AREAS FOR PUBLIC SECTOR TO DISRUPT

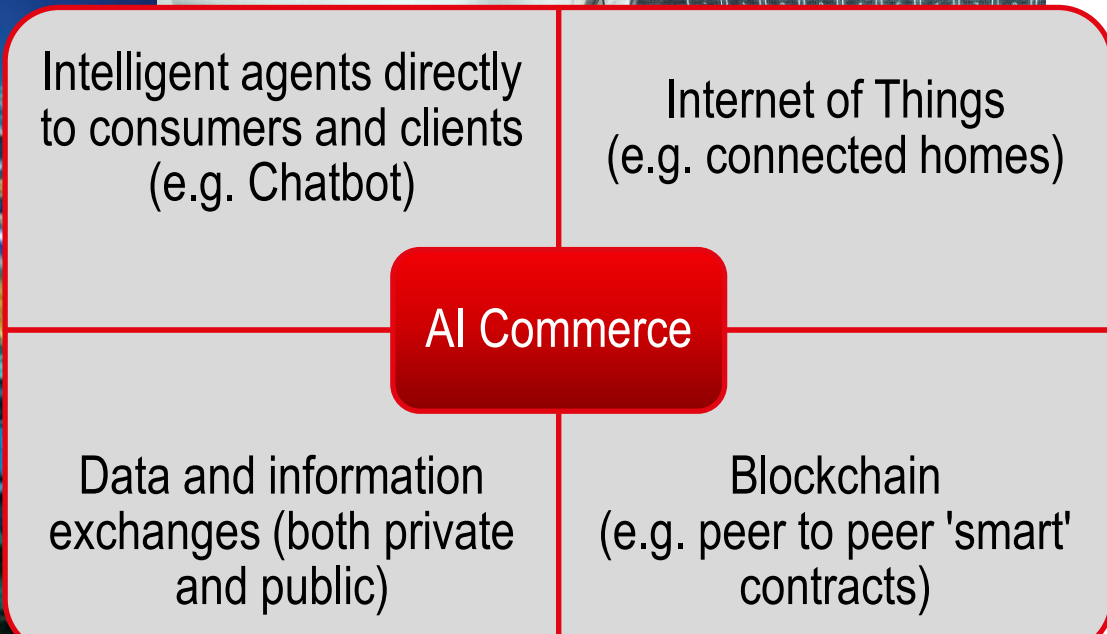
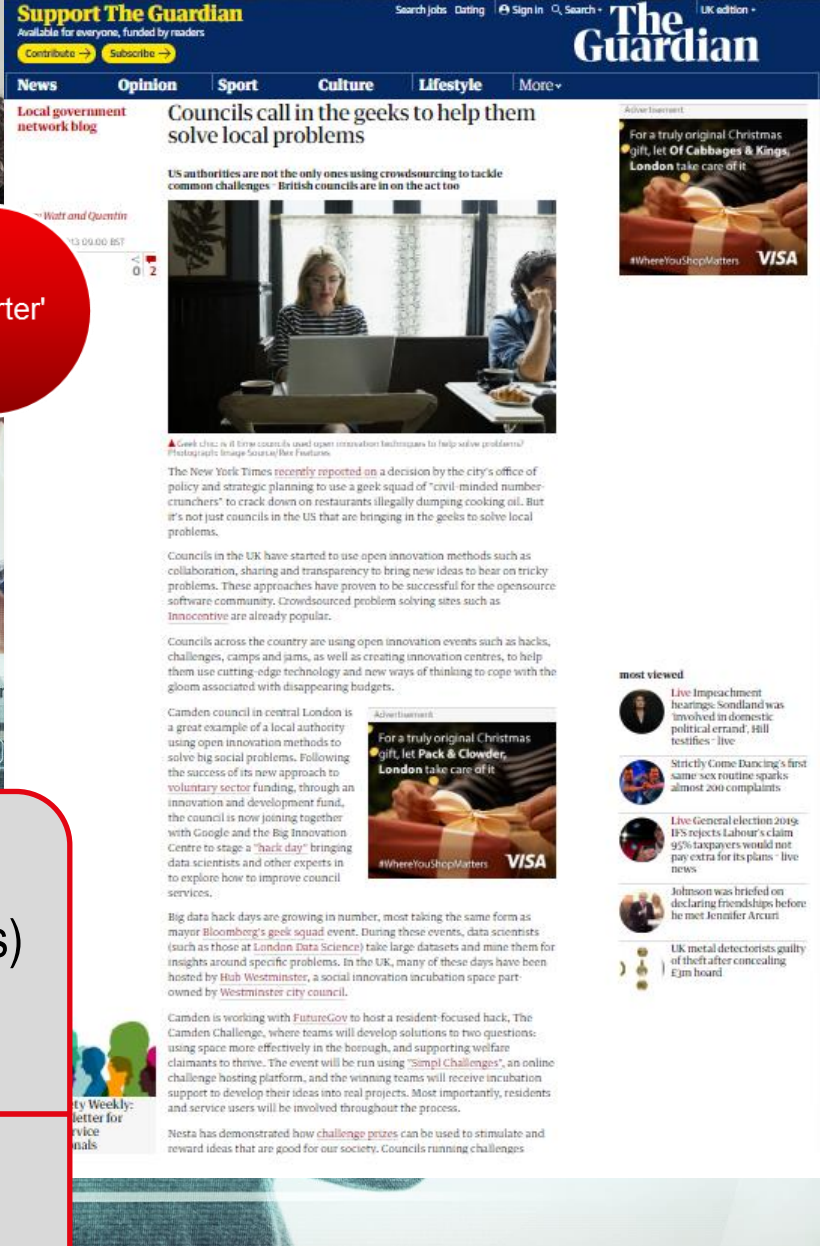
Fairness, transparency, trust, privacy

The “Law and Economics” on ethics – **all about the data**

DATA CAPITALISM and the **PUBLIC VALUE** of data

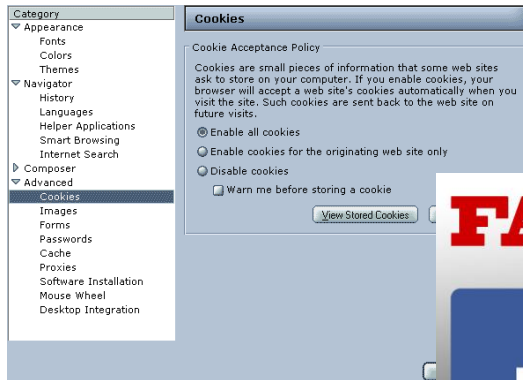
- **Law** - moral rights to own your data (exclusive rights)
- **Economics** – grow the value-pie in an economic system through the new growth engine (BIG DATA & AI) - ethics is about economic based rights to a share of the created value
- **Corporate governance** – social economic responsibility around privacy and use

The future of public services



INTERNET GROOMING

ACCEPT ALL COOKIES



FAKE NEWS



Right to be forgotten...

Whose data is it anyway?

– raw data, behavioral data, data base analytics

From IPO to IDO ?

CREATIVE DATA COMMONS

DATA SHARING
and public value

A Data Charter on how data can be used:

Access to private data drives entrepreneurship,
innovation and increased welfare

- Shift from policies around controlling the data itself to **governing the uses of data**
- Adopt an **'opt-in unless you opt-out' approach** to personal and business data disclosure
- Introduce **'fair use' of personal and business data**
- A **'social contract'** (benefits in exchange for sharing data, as with patents)

DATA CAPITALISM & DIGITAL SUSTAINABILITY

Key implications

Automated
Decision-Making

Inequality

Security threats

Data
Ethics

Algorithmic
Biases

Accountability

Technological
Unemployment

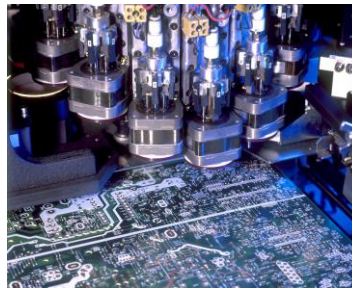
Monopolisation

Inclusivity

Cybersecurity

Long-term
extinction

Streamline the construction process from start to finish

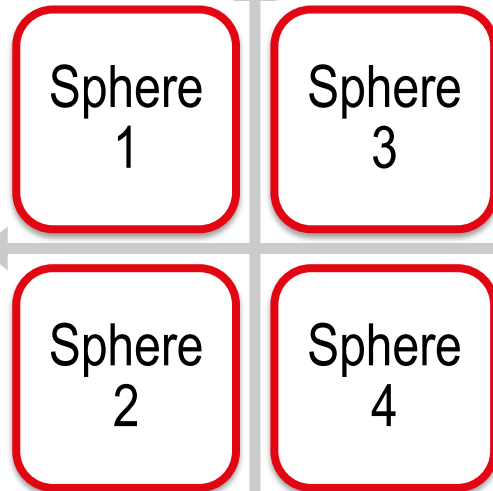


Smart cities and intelligent homes

Software



Narrow / task



General - (Sci Fi)

Robots

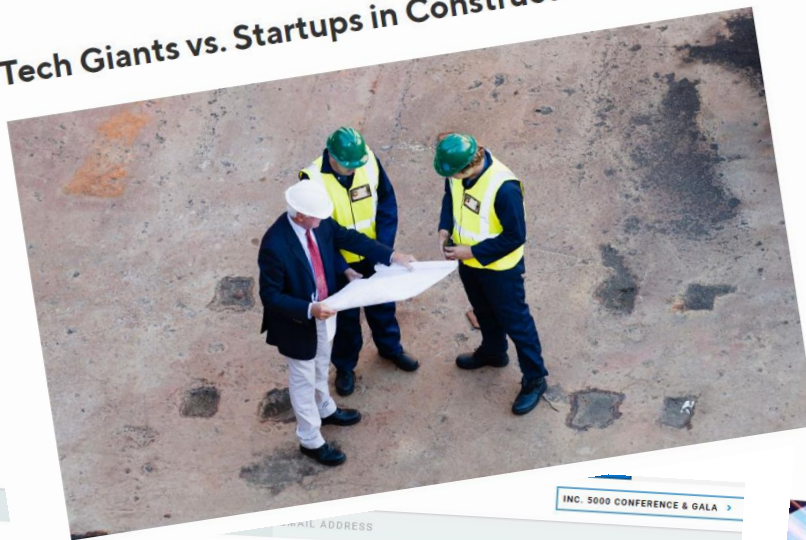
Construction Site Robotics and drones



Smart Sensors for Smart Buildings

News Analysis

Tech Giants vs. Startups in Construction



TECH GIANTS
Being the industry
and
controlling the
industry

DEEP DIVE
How tech giants are driving US construction trends



Credit: [DPR Construction](#)

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Technology powerhouses like Apple, Microsoft and Alphabet (Google's parent company) have boomed far beyond their West Coast roots, ranking among the largest firms in the world. Their growth is not only measured in sales or market capitalization, but also in employees, scope of services and the facilities that are constructed to accommodate them.

PUBLISHED
Jan 23, 2016

Silicon Valley's Next Target: Disrupt the Construction and Real Estate Industries

'Construction Tech' and 'Real Estate Tech' are the next greenfield market spaces.

in f t

By Soren Kaplan Author: 'The Invisible Advantage' @sorenkaplan

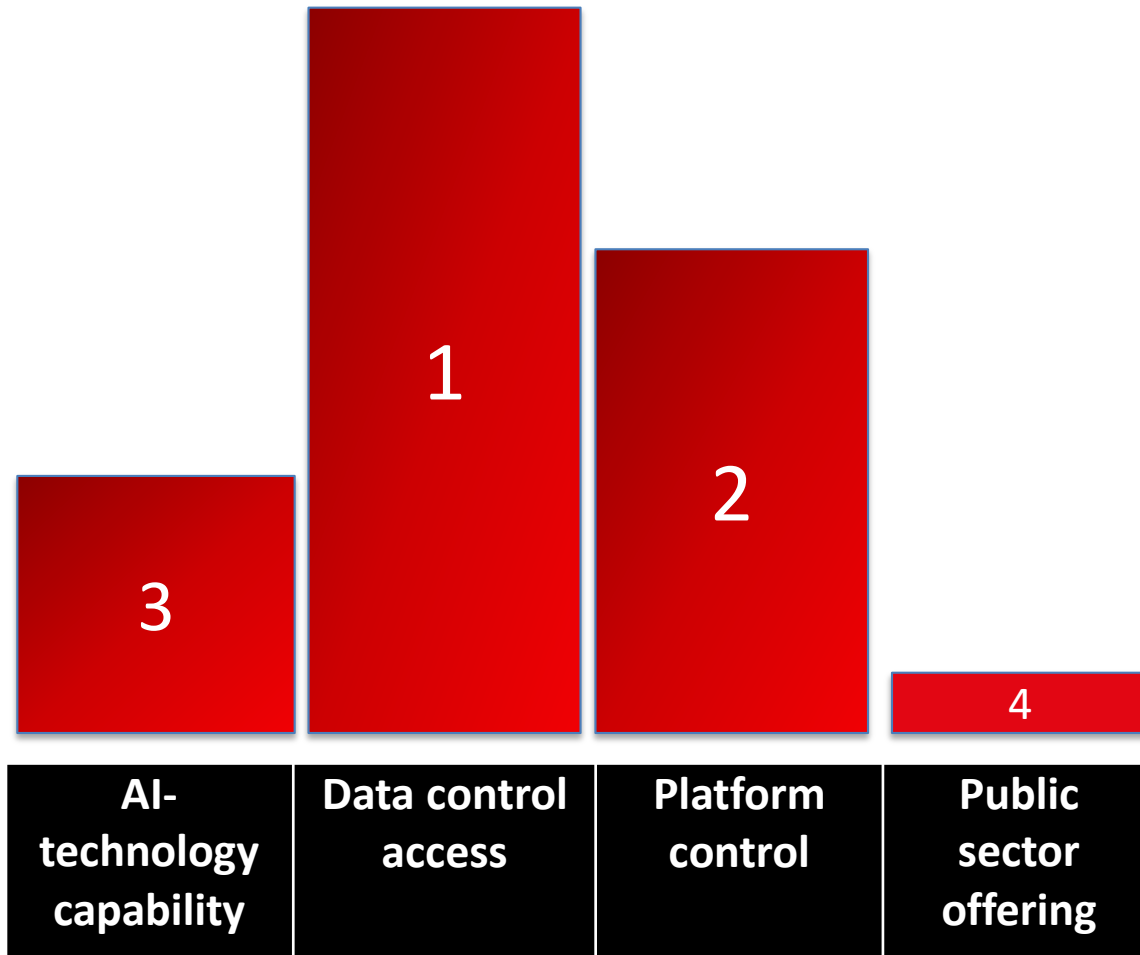
The new age of engineering and construction technology

July 2017 | Article



The winner takes all...

**A Tall Order for the Public Sector ?
How to control the giants ?**

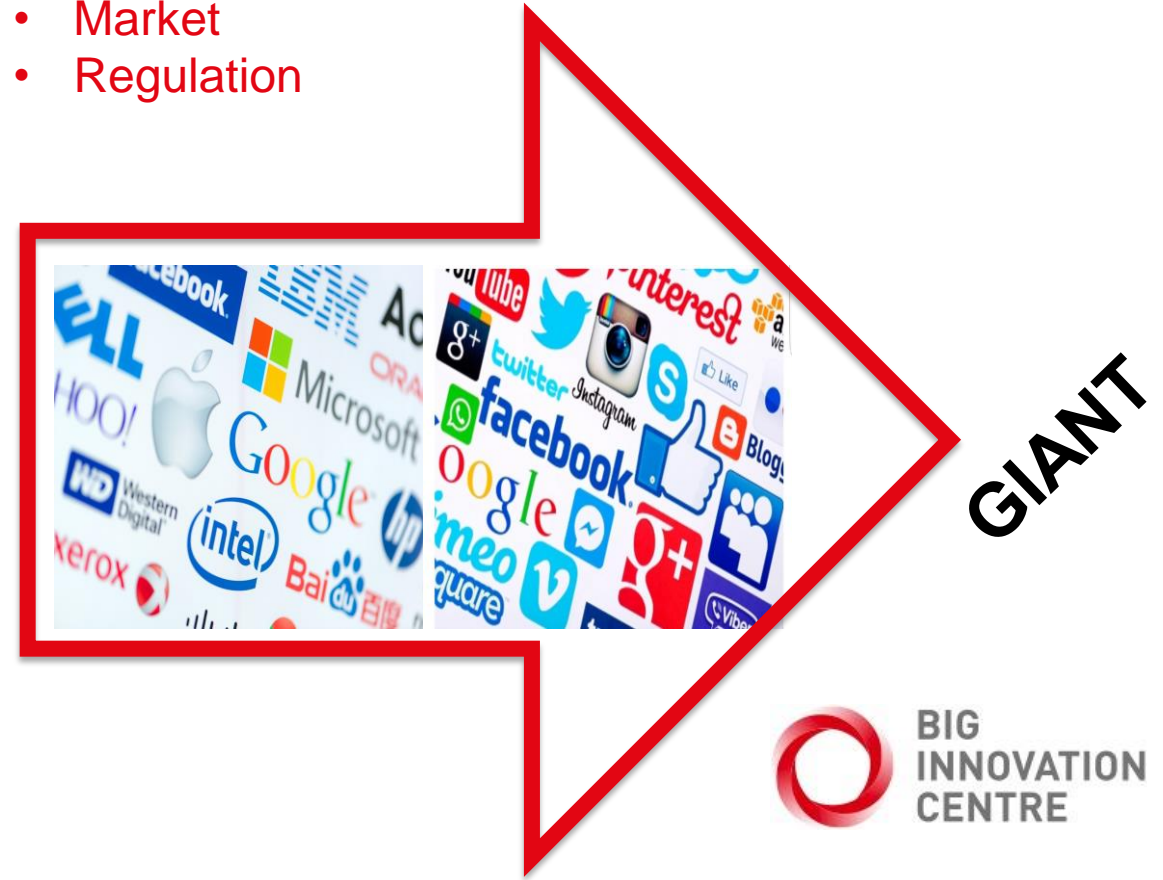


BIG is good but even BIGGER is better

MONOPOLISATION of TECH GIANTS

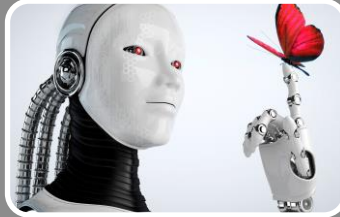
Think different about:

- Purpose
- Market
- Regulation





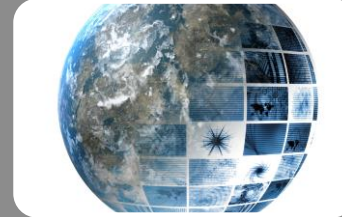
Industry practices and emerging new routines



Policy and regulation landscaping



Infrastructure development (physical and digital)



Blockchain and DLT specific aspects

INDUSTRIES

- FINANCE AND CRYPTOCURRENCIES
- INSURANCE
- LOGISTICS AND TRANSPORT
- NATIONAL SECURITY AND DEFENCE
- PUBLIC ADMINISTRATION
- CREATIVE INDUSTRIES
- THE NEXT GENERATION SERVICES
- EDUCATION AND RESEARCH
- CHARITIES AND NGOs
- AGRICULTURE AND FOOD
- MANUFACTURING
- HEALTH CARE
- ENERGY AND ENVIRONMENT
- **PUBLIC SECTOR**

WHAT WORKS:

Blockchain for Government use cases or solutions?

Must demonstrate:

PROTOCOLS & ACCOUNTABILITY:

Best practice for Blockchain for Government protocols?

Focus on:

PUBLIC DOMAINS	PUBLIC MANAGEMENT WITH BLOCKCHAIN			PROTOCOLS					
	Operation excellence	Service excellence	Product excellence	Purpose	Ethics	Safety / security	Trust	Sustainability	Impact
<ul style="list-style-type: none"> National Identity Management Systems Tax and Internal Revenue Monitoring Post Brexit border control of trade Work and Pensions Grants and Student Loans Land Registration and Property Intellectual Property Rights Public Procurement Voting and Democracy Secure Banking Services Healthcare Education and skills Sport Justice and Tribunal Services Environment, Food and Rural Services 	<p>TESTABLE</p> <ul style="list-style-type: none"> Clear ways to TEST what excellence looks like 			<p>TESTABLE</p> <ul style="list-style-type: none"> Clear ways to TEST if the protocols are followed 					
	<p>ACCOUNTABILITY</p> <ul style="list-style-type: none"> Clear pattern of ACCOUNTABILITY, and who is accountable? 			<p>ACCOUNTABILITY</p> <ul style="list-style-type: none"> Clear pattern of ACCOUNTABILITY, and who is accountable? 					



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A Necessity or a Tall Order for the Public Sector?

ECOSYSTEM PLAYER

DATA GOVERNOR (data value, IDO)

SOCIAL VALUE (not tech giant value)



THANK YOU!

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