

## Fast forward 2025

# The world established as a global open innovation and investment hub

With the G8 Summit event focused on how governments can create the conditions for innovation-intensive economics, Big Innovation Centre will – with its partners – showcase this future and how we work on creating it via Open Innovation.

#### Welcome from Director, Professor Birgitte Andersen and Chair, Will Hutton

Welcome to the Big Innovation Centre. The UK's leading test bed for Open Innovation. The time during your visit to the Big Innovation Centre will be fast forwarded to 2025. You will be shown the UK as a thriving global open innovation and investment hub. This is the vision shared by the world leading organisations who make up the Big Innovation Centre.

We hope the G8 Summit 2013 will work with us to help unleash this vision across the world.

## **Big Innovation Centre vision for 2025**

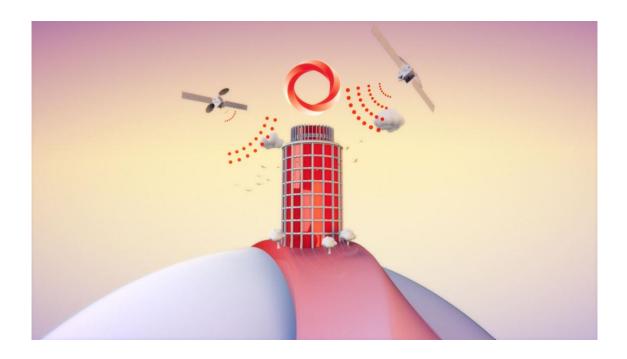
The first flush of the digital economy boom is over. The online economy has reached maturity and the online world is as natural a habitat for business, commerce, education, entrepreneurship and social networks as bricks and mortar were for 20th century societies. Business models and regulation have adjusted in line with the opportunities of a progressive communication infrastructure and the digital divide – which for decades had separated the online haves and have-nots by their ability to adopt, use and exploit high-quality digital service – has closed completely.

Inequality has been starkly reduced in other areas too: exponential leaps in technology innovation in areas such as the low-carbon economy, renewable energy, life sciences and health economics have massively boosted sustainable growth and jobs, catalysing greater social mobility and revolutionising the quality of life for all groups within society.

Close collaborative innovation networks comprising global corporations, small and medium-sized enterprises, banks, research organisations, education institutions and the now highly enterprising state have become embedded as the natural approach to doing good business. In Britain, myriad such networks are striving together to maintain the UK's unparalleled position as a global hub for innovation. Despite their achievements, these networks do not rest on their laurels, but look to leap again into new waves of technology and innovation for the good of society.

This is not a dream, but the Big Innovation Centre's vision of Britain in 2025.

Director, Birgitte Andersen, Big Innovation Centre launch, blog 6 September 2011





### **Agenda**

We will showcase how disruptive technologies, business models and approaches to R&D are transforming **health delivery**, **domestic energy**, **and finance**. We will focus on how, through open innovation, multinational corporations engage with networks of SMEs, research facilities, entrepreneurs and an enterprising state to deliver this positive vision of the future.

#### 1) 40 minutes show: Fast Forward to 2025

Through snapshot presentations and films, you will see how new disruptive technologies became solutions for business and social challenges, how Big Data and the 'Internet of things' created opportunities for green growth and health, how new business models enabled the banks to catalyse growth. You will see how Open Innovation got us here.

#### 2) 40 minutes 'Question time' event on Open Innovation

You are invited to put your questions to a panel of CEOs and senior staff from the partners of the Big Innovation Centre. Explore what the G8 can do to get us to the 2025 we have just seen.

- Will Hutton (Chair of Big Innovation Centre and Principal of Hertford College, University of Oxford)
- Birgitte Andersen (Director, Big Innovation Centre)
- Shaygan Kheradpir (Chief Operations & Technology Officer, Barclays)
- Jean-Benoit Ritz (UK R&D Coordination Director EDF Energy)
- Anita Kidgel (Vice President Corporate Strategy, GlaxoSmithKline)
- Jon Hague (Vice President Open Innovation, Unilever)
- Iain Gray (CEO, Technology Strategy Board)

#### 3) 1 hour drinks reception

#### The video: Fast forward 2025

#### Introduction

In 2025, Energy, finance and health – to name but a few industries – are transformed by the new digital alchemies.

Networks of business, banks and universities collaborate, exploiting hitherto unimaginable volumes of digital data, to generate jobs and wealth we thought we could only dream of, even the 'have-nots' have joined in.

The BIC will continue to map and create this 21st century world.

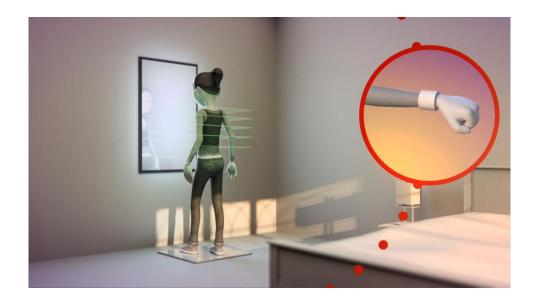
We create a space for cutting edge companies to trust and open up to each other's ideas and insights: co-creators of the new.

Here companies meet with each other and universities and public agencies that in the ordinary way they never would – to share, test and co-realize ideas for creating innovative wealth. Good business and open innovation go hand in hand.

We know how to design markets, where technology and open science are leading us and how best to finance the new business models and what skills underpin all this? How to build an open innovation government that is a partner and enabler of this grand vision.

We practice what we preach. We pool and share resources. Companies and research counsels and others second innovation activists to work with us. We pilot and test new ideas.





#### Healthcare

Mankind's dream – to be and stay healthy and illness instantly to be put right – is suddenly a reality.

Your body's well-being is constantly monitored by smart sensors letting you and your doctors know exactly what is happening and why – hour by hour.

If they trigger a health alert, you get instant tailored remedies informed by the vast data mapping your genome. The right medicines are printed from a 3D printer.

Your lifestyle becomes your preventative shield. Health costs plummet.

Your data along with millions of others becomes the foundation of a new health science base. Health services become a whole new world. Hospitals and personalized sensors, drug companies and sport centres collaborate to devise new solutions. We are well.

#### **Energy**

You are in personal energy command. You make the decisions on what energy you use, how you use it and what sources are.

Your smart house talks to the solar panels, nuclear power stations, and wind turbines about what energy they can offer and what you want – they in turn communicate with each other. Your home's roof, heat pump, walls and windows interact with nature to become micro energy accumulators. The local smart grid keeps a tally on what energy you and your neighbours are using, and who has some spare for the others to use.

Your home's smart censors are constantly gathering how much energy all your appliances are using – and how much you lose through not being efficient.

The data is sent to all your power sources in real time: your smart meter works out how to get the most for your money. Waste is eliminated: energy is cheaper.



#### **Finance**

Finance is made easy. The costs of everything you do are recorded in real time as unit costs – whether visiting the sports centre or using the washing machine. You can pay – or borrow if you choose — as you go.

No more financial surprises. You monitor your spending against your income and your wealth. Your tablet becomes your financial friend, automatically telling you about your child's birthday, warning about your financial limits – or your new found spending power.

Shops and online sites know what you like: they alert you to special deals. Your tablet bank tells you which local enterprises and entrepreneurs need investment. Newly financially empowered, everybody becomes their own angel investor.

All of this is possible because of the new powerful digital platforms through which massive volumes of data flow. Your street is alive with data where your personal networks are mapped – a personalised financial hub.

#### **Big Data**

Transformative technologies like the railway or aeroplane changed the world. Now digitalisation and big data are the new transformative technologies doing the same.

Previously siloed and unused data from our mobiles, our computers, our banks, our hospitals, our energy companies, our shops, families and friends is now routinely gathered. And morphed and synthesised to create new understanding and possibilities.

Publishing and music became data phenomena first. In 2025 every corner of society or economy is affected. Now cars without drivers, surgery without doctors and machines that fix themselves are all made possible by big data.

But data has to be shared quickly, effectively and safely. The government, enabler of this world, has a new duty – to sustain the trust and openness without which the data won't flow.

Companies are open innovators. Universities are more open. Science is more open. Intellectual property law is designed to open up access to data – not close it down.

#### **Finale**

The Big Innovation Centre and its partners are the open innovation co-creators who helped catalyse and build this future. We knew delivering it was full of risk, which is why we shared and collaborated. But that opened up opportunity after opportunity. As a result the world ahead is much healthier, more sustainable, more inclusive, more prosperous but best of all more fun!



Governments around the globe hold vast stocks of data whose insights are crucial for both public bodies and businesses. Public bodies can use these insights to design smarter services and deliver them more effectively. Business can use these insights to boost innovation and create growth and jobs. A key question for Ministers and officials alike, in every country, is whether we are getting the very best value from that data. Are there ways we can make it work better? By unleashing Big Data, can we grow existing businesses to encourage innovative business models? In finding the right approach in liberating this data we must find ways of respecting the privacy of the citizens and businesses while unleashing the economic potential of data. This novel approach creates opportunities and benefits for all.

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PARLIAMENTARY UNDER SECRETARY OF STATE FOR INTELLECTUAL PROPERTY

## An introduction to the Big Innovation Centre

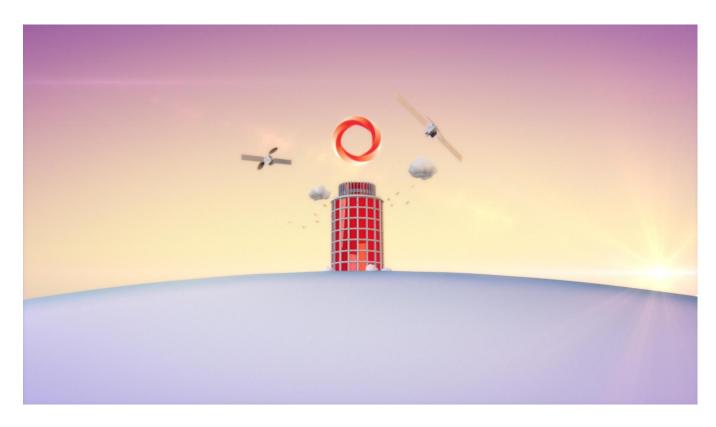
#### Big Innovation Centre is a unique partnership

The Big Innovation Centre is a partnership of `12 global businesses, a private trust, eight world-class UK universities and four intermediary bodies:

Allianz Insurance, BAE Systems, Barclays, Design Council, EDF Energy, Experian, GlaxoSmlithKline, Google, Guardian Media Group, Higher Education Funding Council for England (HEFCE), Logica UK, MAN Group, PriceWaterhouseCoopers, Science and Technology Facilities Council, Technology Strategy Board, Unilever, and a consortium of 8 universities led by the University of Oxford (also including Bristol, Cambridge, Edinburgh, Leeds, Newcastle, Sheffield, and University College London).

Our work is also supported by the Intellectual Property Office, Nesta, the Economic and the Social Research Council (ESRC), as well as the EU Programmes.

Launched by UK Business Secretary Vince Cable in September 2011 the Big Innovation Centre exists to make the UK a global innovation and investment hub, to build a world-class innovation ecosystem, and rebalance and grow the UK economy. The Director is Professor Birgitte Andersen and the Chair is Will Hutton.



#### An open innovation and investment hub par excellence

The Big Innovation Centre is a distinctive and unique initiative, co-designing research with businesses. Knowledge transfer between partners and interactive learning is key to its open innovation method of carrying out research on how to create the best modes of coordination in an enterprising state, promote innovation and encourage wealth creation. In addition to making financial investments in the Big Innovation Centre, all of its partners commit to opening their doors to us: sharing their people, ideas and talent, through designated 'innovation activists' appointed in each of the companies, university groups, and associate public institutions that we collaborate with. Some of our partners also allocate their 'innovation activist' to work with us at the offices of the Big Innovation Centre in London.

We learn from evidence-based research, practice, trial testing, and through business and policy forums. We are also reality testing evolving ideas with leading companies and incubating open innovation experiments and test beds.

Our work targets areas identified as presenting gaps in existing knowledge by firms and governments, who have clear insight into empirical gaps and practical challenges confronting innovation. Our core focus areas include:

- 1. building innovative markets, sectors, places
- 2. banking business models to support innovation and entrepreneurial finance
- 3. university-business links
- 4. skills
- 5. organisations and business models
- 6. building an enterprising state, policy and regulation.

Other top themes for 2013 include Big Data test beds; Big Data service lab, IP Manifesto, Business Accelerator, Triple Helix International Conference, and an Innovator's Column in the Guardian.

The challenges associated with innovation are global. The Big Innovation Centre is committed to making the United Kingdom a global hub for innovation and investment.

**We are bringing Open Innovation into the spotlight:** As Will Hutton described the Big Innovation Centre in the Observer on Sunday April 30<sup>th</sup>, 2013:

"The Big Innovation Centre, a 'do-tank' I chair, devotes itself, with its largely business membership, to thinking through the ecosystems that might best support growth in frontier technologies and helps develop practical, open innovation 'test-beds' – co-creating business models and markets."

#### Entrepreneurial investment in the carriers for growth

Governments must work alongside business and finance to invest in the UK's ability to take advantage of the enormous opportunities provided by emerging technologies. Our cross cutting themes here are anchored around 'Big data and digital', 'Sustainability, green growth, low carbon' and 'Bio-medical, life science and health care'. Such technologies are core to unleashing productivity, jobs, and export markets. They are key anchor points in the ecosystem and central to BIC's vision for socio-economic progress. These are today's equivalents of the steam engine, electricity or the internet – the so-called 'general purpose technologies' (GPTs) that change the world and drive growth.

The Big Innovation Centre aims to be the key catalyst in making investment and innovation foster business success in the UK.



#### **Partners**

The Big Innovation Centre is supported by the following companies, public bodies and universities.

































Technology Strategy Board Driving Innovation



















## **Contact details**

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## www.biginnovationcentre.com

The Big Innovation Centre is an initiative of The Work Foundation and Lancaster University. Launched in September 2011, it brings together a range of companies, trusts, universities and public bodies to research and propose practical reforms with the ambition of making the UK a global open innovation hub as part of the urgent task of rebalancing and growing the UK economy, and with the vision of building a world-class innovation and investment ecosystem by 2025. For further details, please visit www.biginnovationcentre.com.