Technology Strategy Board
Driving Innovation

Re-Skilling for Recovery in the Regions

Linking the Innovation and Skills Agendas

15th October 2009

David Coates
Head of Knowledge Exchange
Technology Strategy Board

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Innovation is vital in a downturn

- When companies and nations emerge from the downturn, it is vital to remain globally competitive
- Innovation cannot be 'turned on' quickly – but it can be extinguished in a single decision.
- Developing skills to support innovation is paramount

"In the middle of difficulty lies opportunity" Albert Einstein

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The Technology Strategy Board is…

A UK-wide body supporting business innovation

for business benefit

for economic growth

for quality of life

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It's all about business

- We help *Maintain* the competitive position of our leading businesses against global competition
- We identify and *Grow* sectors and businesses with the capacity to be among the best in the world, stimulating them to fulfill that potential
- We *Nurture* today's emerging markets and technologies into the growth sectors of tomorrow through identifying skills

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Our Vision

For the UK to be a global leader in innovation and a magnet for innovative businesses, where technology is applied rapidly, effectively and sustainably to create wealth and enhance quality of life…

We need to ensure the right skills are available in the right place at the right time

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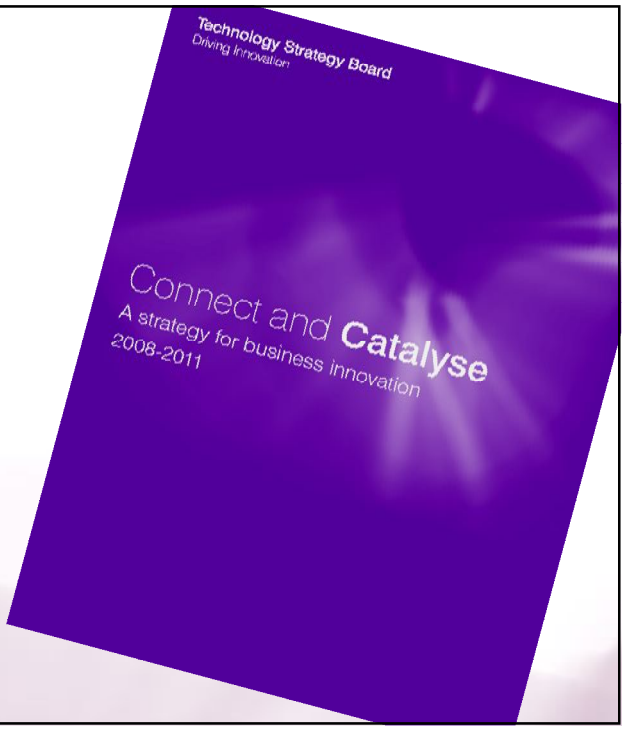
Our Strategy



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Investment criteria

Can the UK do it?	Is there a large market opportunity?
Is the idea 'ready'?	Can the Technology Strategy Board make a difference?

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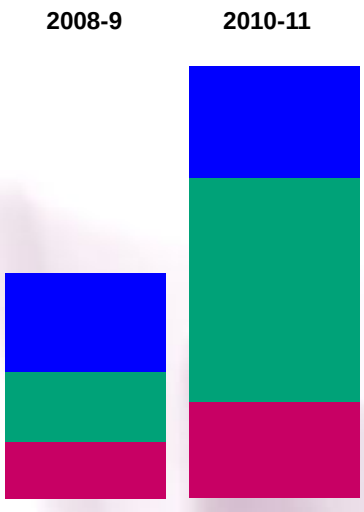
£1 billion investment over 3 years



The Innovation Climate

Challenge-Led Innovation

Technology-Inspired Innovation

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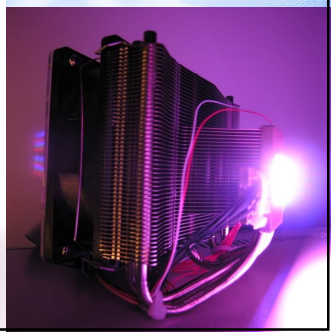
Technology-Inspired Innovation

- Advanced Materials
- Bioscience
- Electronics, Photonics and Electrical Systems
- Information and Communication Technologies
- High Value Manufacturing
- Nanotechnology
- Emerging Technologies



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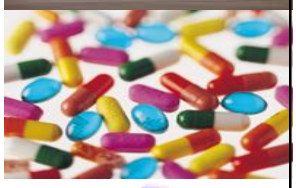
Challenge-Led Innovation

- Medicines & Healthcare
- Energy Generation & Supply
- Transportation
- Environmental Sustainability
- Built Environment
- Creative Industries
- High Value Services



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Innovation Climate

- We will inspire and enable people to be part of the innovation economy
- We build national confidence in the power of innovation
- We build networks
- We support knowledge exchange for individual
- We identify skills gaps and needs

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Knowledge Transfer Networks

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Knowledge Transfer Networks

KTNs…

National network in a specific field of technology or business application

…the goal of stimulating innovation through knowledge sharing across all sectors

- Materials
- Biosciences
- Electronics, Photonics, Electrical Systems
- ICT
- Chemistry
- Industrial Mathematics
- Nanotechnology
- HealthTech & Medicines
- Creative Industries
- Aerospace & Defence
- Transportation (e.g.Low Carbon)
- Environmental Sustainability
- Modern Built Environment
- Financial services
- Energy Generation & Supply

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Knowledge Transfer Partnerships

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Knowledge Transfer Partnerships

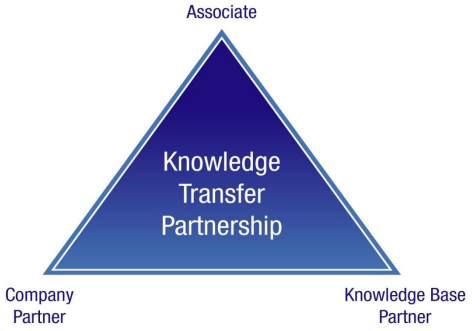
KTPs…

It is the company that wants the knowledge

It is the knowledge base who has the knowledge

The Associate is employed to transfer and embed the knowledge

10 weeks to 3 years



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Innovation & Skills

We are ensuring that the Technology Strategy Board's innovation strategy identifies skills gaps and offers ways of addressing these gaps:

- HE STEM Programme
- Science Diploma

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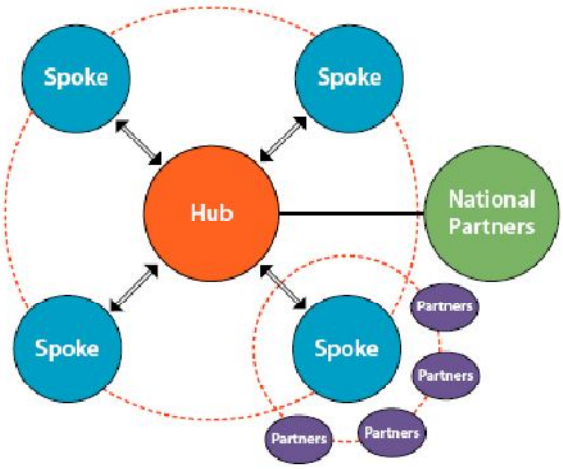
HE STEM Model – University of Birmingham



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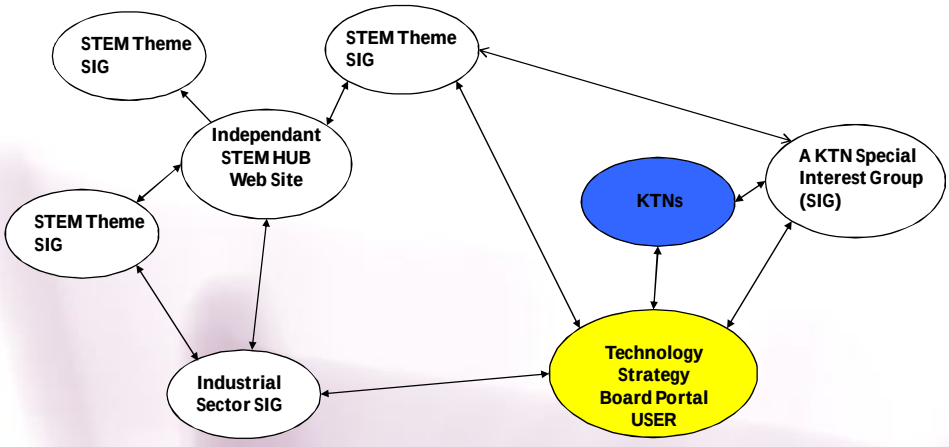
HE STEM and KTNs



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Science Diploma and KTNs

We are investigating ways for the KTNs to become involved with informing the needs and shape of the Science Diploma programme

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