

**Technology Strategy Board**

Driving Innovation

# **#tsbiot programme**

**Loughborough**

**11-12 July 2012**

Dr. Maurizio Pilu

Technology Strategy Board

## What is the Technology Strategy Board?

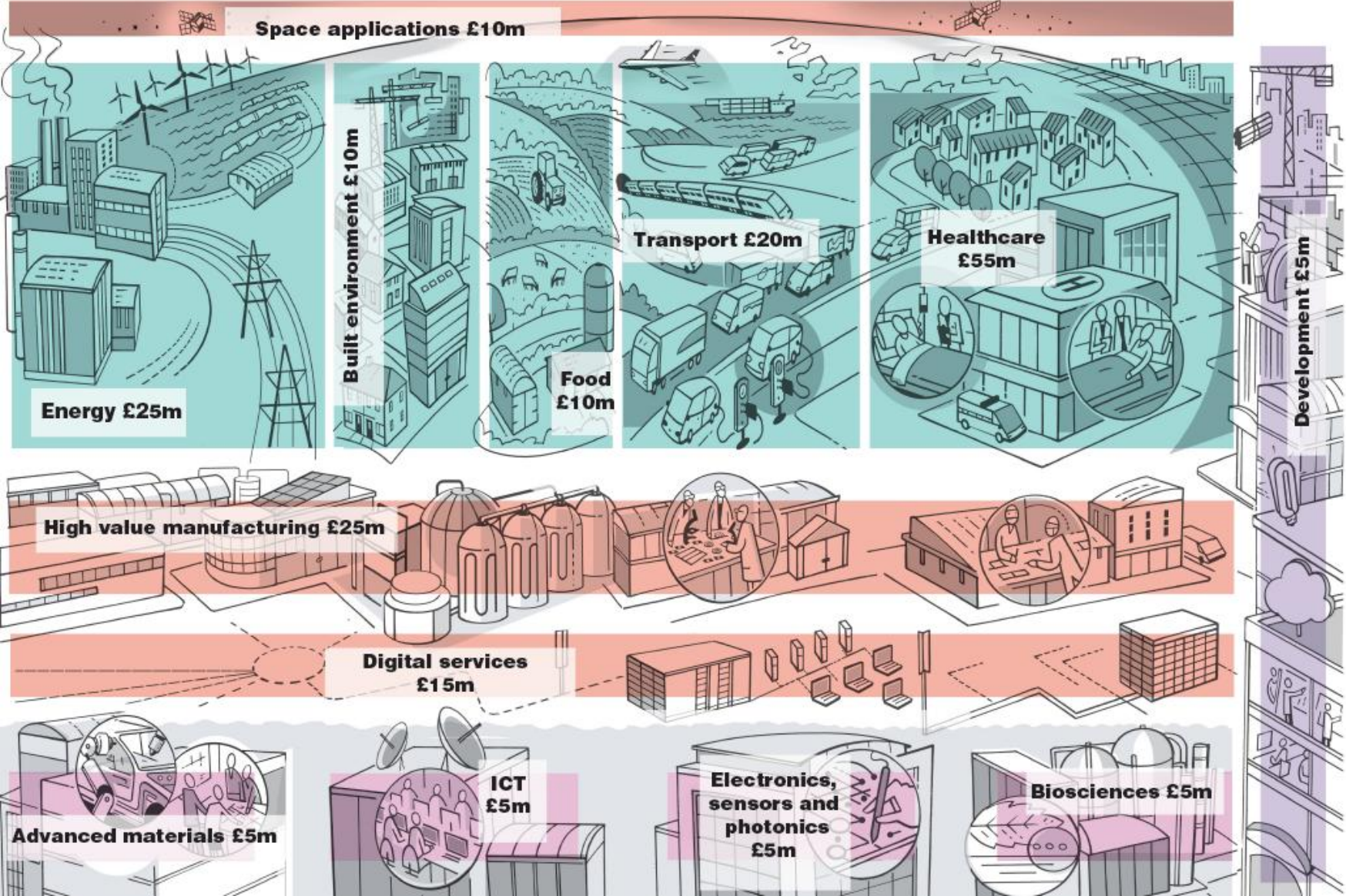
- We are the UK's Innovation Agency
- A national body set up in 2007 to invest in business innovation
- We work across business, universities and government
- We mostly come from business
- We have a budget of over £300m/year

## Some facts and figures

- Invested – with partners - >£2b in innovation
- Invested in over 3000 projects
- Joined forces with DAs, RDAs, RCs, EU
- Brought >110 univs to engage with businesses
- >£35m invested in small business in SBRI
- 30,000 businesses on our \_connect innovation platform

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## Driving Innovation



## What is the IoT ...

- Pervasive Internet
- Connected Environments
- Smart Places
- Smart Cities
- Connected Cars
- Ubiquitous
- Computing, Everywhere
- Connected World
- Physical Internet
- Smart Homes
- Smart Meters
- Wireless Sensor Networks
- Ambient Intelligence
- Machine to Machine
- Web of Things
- The Future Internet
- .....

## The multiple perspectives of the IoT

- It's about sensors & devices
- It's about M2M
- It's about a big IT system that controls stuff
- It's all about data value chains
- It's about new services
- It's the Internet – no such thing as IoT
- It's about the user experience
- It's about growth-opportunities
- It's about new business models

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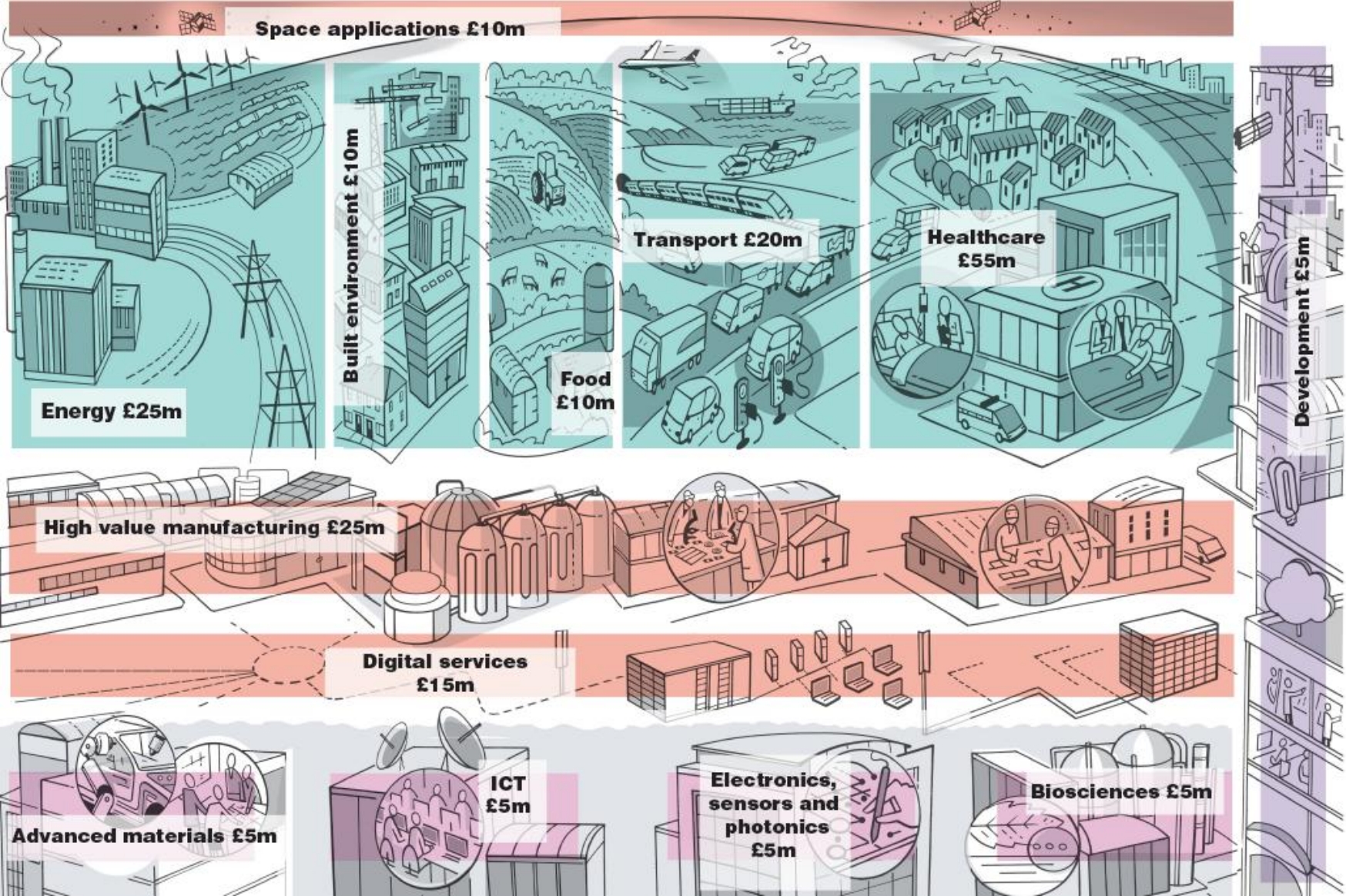
IoT: *'More and more **information** about our physical world becoming available and **networked**.*

Video

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## Driving Innovation





① WHERE NOW?  
- BUILDING IoT INFRASTRUCTURE

WE NEED?  
BOTH 'MORAL' & 'FINANCIAL'

LEAD FOR  
TELECOMS  
HEALTH  
INDUSTRY  
RESEARCHERS  
BUSINESS

Play by the rules  
Greater number of IoT apps  
Small IoT devices

PRODUCTS  
SPECIFIC  
SERVICES  
FOCUS ON  
ABILITY TO DRAW  
S WITH SOLID  
ES.

SERVICE SUPPORT  
SECURE MULTILAYER  
OSIS.

STABILITY  
STABILITY  
STABILITY  
STABILITY  
STABILITY  
STABILITY  
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STABILITY  
STABILITY

Plan your  
Business  
Market  
Market

FACTORS  
USER CASES

ABILITY OF  
NING

KEYS TO  
COST WAYS TO

STABILITY  
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RESEARCH AS TO 'BALANCE'  
through culture  
through 'aesthetics'

MANAGEMENT OF  
INGS  
AND PROCESS  
FLOWS,  
OPERABILITY  
CONNECT PRODUCT  
ABLE BUSINESS  
DEVELOPMENT &  
INTER-PRODUCT  
PROCESSES.  
STANDARDISE  
REQUIREMENT



## A strategic “horizontal” view

- **Challenge**

- Help the UK gain an early advantage in Internet of Things adoption, applications and services development

- **Angle**

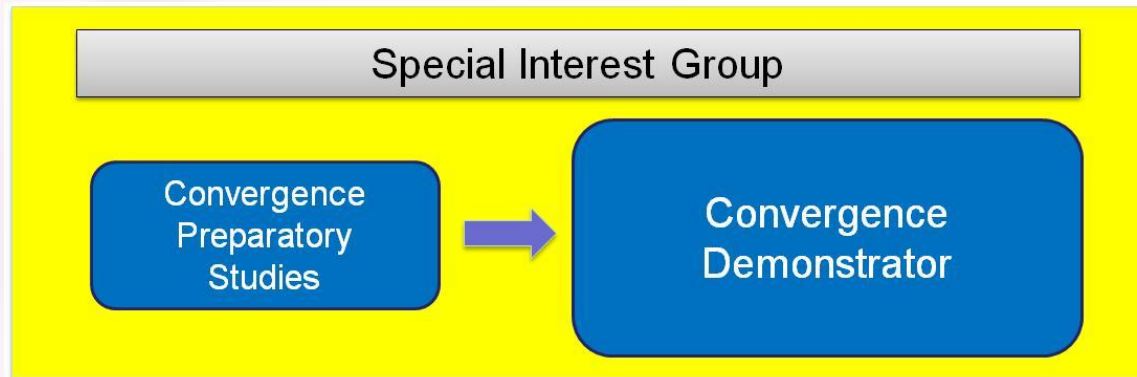
- **Information value-chain view** from “things” through applications and services to end users
- **Actors & users (B & C)**

- **Focus**

- enablers of - and barriers to - the **ecosystem of applications and services** of the Internet of Things

## The #tsbiot programme ....

- A £5m managed investment
- Special Interest Group
  - <https://connect.innovateuk.org/web/internet-of-things>
- Internet of Things Convergence
  - £500k for preparatory studies
  - 2<sup>nd</sup> half 2012: £4m for a demonstrator activity



## #tsbiot programme activities so far

- Built & facilitating community of >1000 members
- Consultation with industry and academia
  - → interim report published
- Raised profile within communities (e.g. Creative industries) and across communities
- Funded and managed collaboration between 10 **preparatory studies**
- Showcasing innovation
- Leadership activities on challenging areas
- Supporting scoping of IoT convergence demonstrator

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## → Research road mapping

- Collaboration between
  - TSB
  - RCUK's Digital Economy Programme
  - AHRC, EPSRC, ESRC
  - Creative Industries, ESP, ICT KTNs (IOT SIG)
  - **YOU!**
- Inform the councils, TSB, the Catapults, EU, policy makers on the key research challenges from a UK perspective in this exciting emerging area