Connected Digital Economy Catapult

PHEE Annual Conference 9th January 2013



PHEE A forum for Academic Leaders in Electrical Engineering and Allied Technologies



Professors & Heads of Mechanical & Manufacturing Engineering





Catapult is a Technology Strategy Board programme

The Vision

To make the UK the best place in the world to develop and launch digitally-enabled systems, services and products

Why? To unlock the digital economy's massive economic potential and support its rapid commercialisation by UK plc.

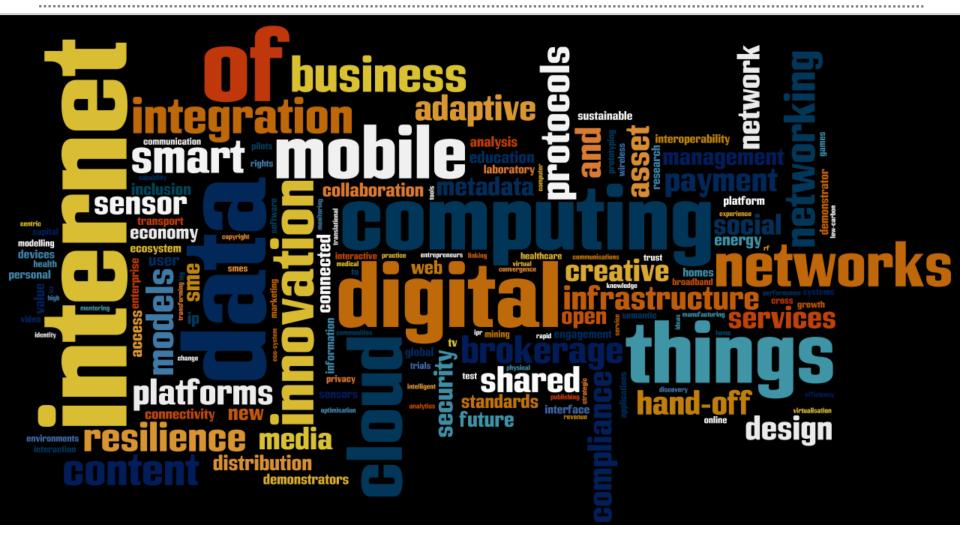
How? The Catapult will achieve this by creating a centre forcing multi-disciplinarity working and by

- being highly networked, collaborative and business led
- developing world-class R&D&I expertise and facilities

and above all, by bringing together large and small businesses, research organisations, and the public sector in ways that haven't happened before.



What the consultation told us





Main market opportunities addressed

In-depth consultation has identified 3 areas where the community expects the Catapult to add most value.

Media and Content

Supporting the development of leading-edge platforms and applications with SMEs and large companies

Digital adoption across all services sectors

Transferring expertise and models from sectors with high digital penetration (eg media) to newer sectors (eg education) and developing solutions to sector-level problems

Merging of physical and virtual worlds

Supporting the development of "platform-level" solutions and making test beds and tools available to SMEs and large companies to develop applications



Core R&D and Innovation capabilities

Catapult world-class expertise in these areas will help its communities explore and develop massive opportunities in each of the market areas identified.

"Big Data"

There is limited ability to identify, access, interrogate, manipulate and re-use the vast data resources available via the internet

User centricity

There is weak understanding of user needs/expectations which are typically not embedded into all elements of system design inhibiting take-up & usability

Trusted internet

Poor user identification and authentication, privacy, trust and security on the internet is inhibiting its adoption in a wide range of markets and applications

Infrastructure and mobile

The nature of emerging internet infrastructure is poorly understood yet its impact upon business models and markets will be fundamental and extreme **CATAPUI**

Connected Diaital Economy

Collaboration model for R&D&I

There will always be a much larger R&D and Innovation capacity hosted by UK partners than the Catapult itself. It is therefore vital that this community is happy to collaborate with the Catapult via

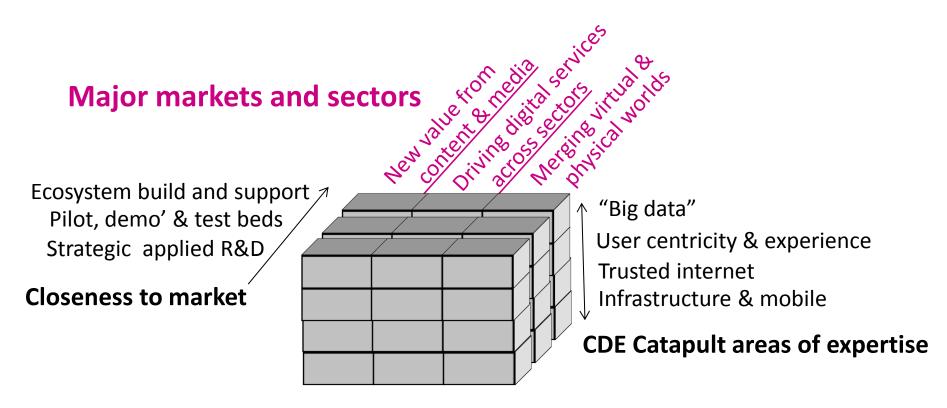
- seconding staff
- making expertise, IP and facilities available (on agreed terms)
- forming consortia to access external grant funding (EC, TSB, ...) so that each project and core capability is highly collaborative between many partners.

Further, to support "pathways to commercialisation", the Catapult and this R&D&I community must support

- where appropriate, developing emerging standards
- Spin-out of Catapult ideas / opportunities
- SME and entrepreneurial engagement



Catapult long term capabilities



Where available, strategic partners with relevant facilities and capabilities will be asked to make them open to others to access. Where not available, the Catapult will develop these assets to support UK innovation.

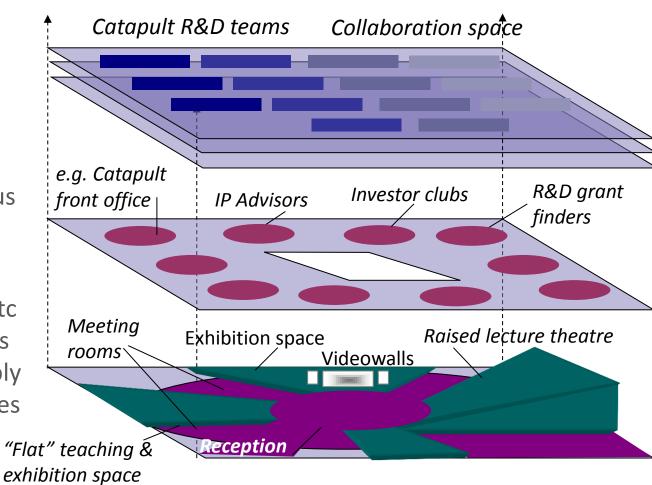
Connected Diaital Economy

Mid-term, this cube has a budget of £27million p.a.

Open access culture

The Catapult has 3 categories of "space".

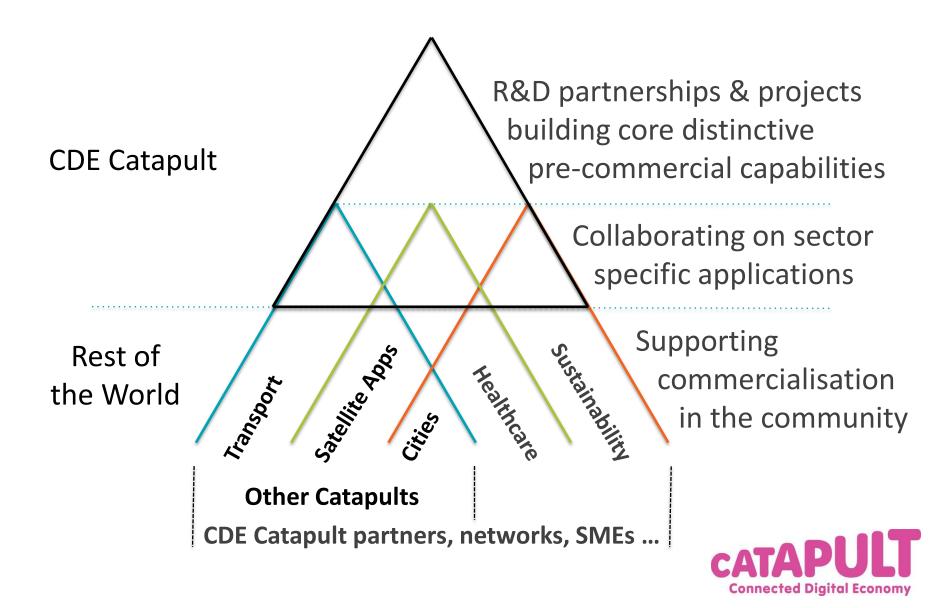
- 2nd In-house R&D space, supported facilities and collaborations
- 1st Catapult front office plus SME advisors/networks
- G "Public" space for exhibitions, teaching, etc creating SME awareness and creating new "supply chains" and communities



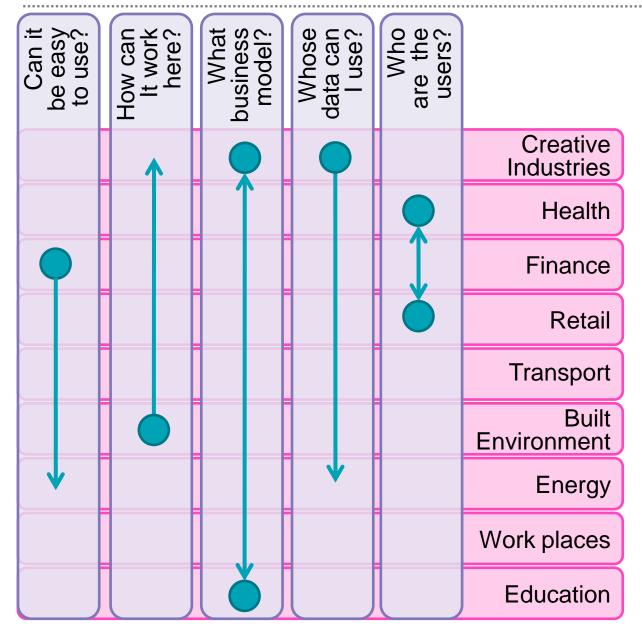
The allocation of space to be determined by Catapult priorities & some of these facilities will be delivered by partners



Application of expertise



Markets can learn from each other



Many questions are asked in different contexts at different times. The Catapult can work across sectors to develop solutions and transfer expertise within and between them.



Connected Digital Economy Catapult timeline

Activity	Dec	Jan/Feb/Mar	Spring/Summer		Autumn
Executive recruitment	Appoint CEO	Chair & NXDs in place			
Delivery team recruitment		Initial seconde full-time sta			
Location		Interim location			Long term location
Scope and deliver R&D&I activities		Scope the initial projects Caunch first Scope then la			
Engage industry and academic partners		Accelerating as internal resources allow & projects launch			



Summary of the vision

Opening in 2013 and configured to:

- operate as a not-for-profit independent company
- ✓ become a world-class centre of applied R&D
- ✓ support the journey "research" ↔ "application"
- ✓ collaborate widely and openly
- ✓ support innovation & business in many "sectors"
- build communities within and between sectors
- provide test-beds, expertise and networks to SMEs
- help UK be the place to innovate



Questions and comments?

Many thanks ...

and please follow-up with thoughts or questions to

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