Digital Catapult

Accelerating the Adoption of Advanced Digital Technologies in the UK

5th June 2018

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Accelerating the *earlier* adoption of advanced digital technologies across the UK.
Our technology programmes

Advanced Digital Technologies - Digital Catapult has identified three technology areas that we believe can positively disrupt business models, create competitive advantage and deliver a superior experience for customers.
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Future Networks

- 5G
- Low Power Wide Area Networks
- Internet of things
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Immersive
- Virtual, Augmented & Mixed Reality
- Haptics

Artificial Intelligence
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**Future Networks**
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**Immersive**
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**Artificial Intelligence**
- Artificial Intelligence
- Machine Learning
Industry Focus - Focused on two key industries with the most growth potential in the UK economy.

Manufacturing

Accelerating the number of trailblazer companies working with advanced digital technologies in manufacturing in the UK.

Creative

Delivering increased research, development and innovation in Advanced Digital Technologies for the Creative Industries.
As completely neutral and experts at the cutting edge of digital, we have a unique position in the economy to deliver impact in these areas. We do this in three ways:

• **Build and operate physical or digital facilities that accelerate UK growth in advanced digital technologies**, that would not exist or be available to companies were it not for Digital Catapult’s intervention.

• **Delivering specialised innovation programmes**, to accelerate earlier adoption and bring together startups, scaleups and SMEs with corporates and academics.

• **Facilitating and delivering collaborative research and development leading to commercial exploitation and de-risking more speculative experimentation.**
A Unique Position
Overview of our bespoke acceleration programmes in different technology areas

**Augmentor**

10 weeks programme supporting start-ups working with immersive tech in partnership with Seedcamp

Focused on companies developing innovative and commercially-focused applications of augmented, mixed and virtual reality.

**MI Garage**

Helps SMEs access the computation power and expertise they need to develop and build machine learning and artificial intelligence solutions

8-10 weeks programme for AI/ML SMEs that are data ready and have immediate need for computation

**Things Connected**

Challenge led IoT innovation programmes with industry

Providing expertise and access to LPWAN networks and testbeds for pilots to SMEs
Hosted hardware
(NVidia DGX-1 and Graphcore IPUs)

Cloud computing vouchers

Access to existing UK HPC infrastructure

Experimentation space with new ML chips

Some early facts and figures

- 3 Cohorts since Jan 2018
- Companies applied: 57
- Companies onboarded: 20
- Average team size: 7 (Range 2-15)
- Impact: over £1m in convened income
London partners

- Imperial College London
- King’s College London
- Queen Mary University of London
- UCL
- Catapult Digital
- Catapult Future Cities
- BT
- Everynet

50+ Gateways
1100+ Users
600+ LPWAN Community
2 Innovation programmes
40 SMEs supported

www.thingsconnected.net
**UK wide programmes** – Regional partnerships to accelerate LPWAN innovation and increase national network coverage. Twelve month programme aims to support more than 100 UK SMEs, deploy more than 200 additional radio sites, including both LoRaWAN and Sigfox technologies.

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<tr>
<th>Northern Ireland</th>
<th>Sunderland /North East</th>
<th>Bournemouth</th>
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<tr>
<td>Ulster University</td>
<td>Sunderland Software City</td>
<td>WND (UK)</td>
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<tr>
<td>– Tourism</td>
<td>– Housing associations</td>
<td>– Council – Landslide monitoring</td>
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<td>– Large scale events management</td>
<td>– Utility network monitoring</td>
<td>– RNLI – smart water side</td>
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<td>– Cross-border freight tracking</td>
<td>– Port management and sea defence</td>
<td>– Vivid homes – asset and facility management</td>
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<td>– Facility management</td>
<td>– National parks</td>
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Council led innovation challenges – Currently supporting 2 London councils to engage with innovators around their challenges. A further programme with 5 other councils planned next quarter.

Watford Borough Council
- Foot fall in the city centre
- Monitoring in taxi ranks
- Environmental monitoring

Croydon Borough Council
- Social care and independent living
- Traffic monitoring
- Environmental monitoring

£20k for SMEs
4 base stations

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<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Smart bike light with environmental sensors</strong></td>
<td>Pilot in Belfast involving 200 hire bikes</td>
<td>Doubled in size and then acquired by main customer</td>
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<tr>
<td><strong>nymbly.ic</strong></td>
<td>People counter for space management</td>
<td>Pilots in NHS trusts, 5+ contracts</td>
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<td><strong>SEE.ENSE®</strong></td>
<td>Flexible sensing platform, AQ monitoring</td>
<td>Facility management for social housing</td>
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<td><strong>Beringar</strong></td>
<td>Pilot in 600 buildings with Camden council</td>
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Thank you

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