The future role of academia in the space sector: Collaboration

Dr Eddie Ross, Knowledge Exchange Manager, Regional Growth Team
Our Mission

// To innovate for a better world, empowered by satellites.
SATELLITE APPLICATIONS CATAPULT

Who are we?

WE HELP ORGANISATIONS GROW THEIR BUSINESS
We help organisations to use satellite applications to grow their business in the UK and internationally.

WE ARE INDEPENDENT
We bring together industry, researchers, end-users and government to explore and develop new ideas.

WE ARE GOVERNMENT BACKED
We are partly-funded by the Government and work closely with Innovate UK, UK Space Agency, UK Science & Innovation Network, and other public bodies.

An innovation and technology company transforming the way the world uses satellite technology and data.
SATELLITE APPLICATIONS CATAPULT

Our focus

UBIQUITOUS CONNECTIVITY
Super-fast, always on connectivity for the digital age

GEOSPATIAL INTELLIGENCE
An ever-growing demand for information that is accurate, personalised, localised and available globally in real-time

ACCESS TO SPACE
Removing the barriers to space to grow UK launch and manufacturing expertise

APPLICATIONS
INTEGRATION FOR A CONNECTED AND INFORMATION CENTRIC WORLD
Our Facility

“We offer unique state-of-the-art and professional facilities designed specifically to help grow the space sector.”

FACILITIES

- Operations Centre
- COMMS Lab
- COSPACE
- Near/Far-Field Range
- CEMS
- 5G Step-Out Centre
- DISC
- Spark Centre
- Video Wall
- Healthy Living Lab
SPACE ECOSYSTEM

• Catapult & UKSA Partnership since 2016.
• 2021-22 launch of joint Catapult-UKSA project to support space sector growth across the UK.
• Focus:
  – Support the evolution of local space Hubs & Clusters.
  – Enhance supply chains and market opportunity development across the UK.
  – Provide regional business, technical & design support services.
Several **new locations** are emerging, exploring opportunities for Space in across the UK. These can be found in:

- Yorkshire
- West Midlands
- North West
- Wales
- Scotland
- WECA
- EM3/Surrey-Hants
- Oxford-Cambridge Arc
SPACE ENTERPRISE LABS

Innovation Spaces for hybrid working

The Satellite Applications Catapult has invested in a number of Space Enterprise Labs, innovation spaces set up to support collaboration across hybrid ways of working. From video conferencing, to event streaming, to virtual reality demos of the latest satellite capabilities.

Visit [www.spaceenterprise.uk](http://www.spaceenterprise.uk) to find out more
SPACE ENTERPRISE COMMUNITY

The Virtual Front Door to the UK Space Ecosystem

A community area and thematic groups to foster collaboration within the regional network

A resource hub to increase visibility of current activities, opportunities, and events across the sector.

To join or for more info, visit www.spaceenterprise.uk
KNOWLEDGE EXCHANGE

Supporting the development and routes to market of new research by boosting the commercialisation of your ideas.

• We build strong relationships with research and academic organisations.

• We have experience in exploiting science and engineering research and supporting the uptake of new capabilities for commercialisation.

• We also look to attract scientific and engineering disciplines outside the space domain, encouraging them to apply their knowledge to space-derived challenges.

• If you are developing a new idea with satellite data, our technical and business experts can help by supporting or collaborating where appropriate.
KNOWLEDGE EXCHANGE

Facilitating Partnerships
Supporting proposals and signposting relevant stakeholders & funding opportunities

Networking Opportunities
Regular meetups and co-organised events with academia, industry, and public & private sector organisations

Supporting Innovation & Start-up
Supporting the development of research and new ideas through to commercialisation
KNOLEDGE EXCHANGE

Facilitating Partnerships – Supporting proposals and signposting relevant stakeholders & funding opportunities

• Collaborative R&D projects
  • 23 CR&D projects with HEIs in either initiation, delivery, or completion stage since 2020

• Researchers in Residence
  • Successful programme to enable leading academics to spend research visits in one or more Catapult centres

• KE Fellowships
  • At a strategic level with their university to identify existing or intended research strengths and un-met commercial needs

• Student secondments/placements/internships
  • Supporting Centres for Doctoral Training (CDTs) / Doctoral Training Programmes (DTPs)
  • Space Placements in Industry (SPIN)

• Leveraging Impact Accelerator Accounts
  • Used on an ad-hoc basis to enable collaboration between HEIs and the Catapult
KNOWLEDGE EXCHANGE

Networking Opportunities – Regular meetups and co-organised events with academia, industry, and public & private sector organisations

- Knowledge Exchange (KE) monthly call
  - Last Wednesday of the month
- Satuccino
  - First Wednesday of the month
- Emerging Technology webinars
  - Bi-annual thematic webinar series which gets the Catapult involved with research during an early stage
- Workshops/Sandpits
  - To delve into problems and uncover innovative solutions to be investigated (in the case of sandpit: using targeted funding)
- Space Enterprise Labs
  - Enabling a Catapult presence within HEIs.
- Space Enterprise Community – Academic Network
KNOWLEDGE EXCHANGE

Supporting Innovation & Start-up – Supporting the development of research and new ideas through to commercialisation

• Access to facilities
  • State-of-the-art Catapult facilities
• Training & guest lectures
• Business advice/support
  • Start-up business support within Satellite Applications Catapult’s offer
• Signposting
  • Signposting to opportunities to support innovation and technology transfer
1. **Mission:** Clarity of mission is essential for efficient and effective KE (strategy, priorities, evidence, etc.).

2. **Policies & processes:** Institutions could provide a clear set of policies & processes covering areas of KE (exploitation, access, research, engagement, etc.).

3. **Engagement:** Build effective relationships by having clear routes to access information and expertise in the university (enquiries, agreements, arrangements, support, etc.).

4. **Working transparently and ethically:** To understand the ethical and charitable regulatory environments in which institutions operate (published policies & requirements, respect etc.).

5. **Capacity building:** Staff and students are developed and trained appropriately to understand and undertake roles and responsibilities in the delivery of successful KE.

6. **Recognition and rewards:** For staff and students who perform high quality KE activities.

7. **Continuous improvement:** Proactively strive to share best practice with our peers and have established processes for learning from this.

8. **Evaluating success:** Regular monitoring and review of strengthening KE performance (self-assessment, third-party review, governing body review, etc.)
Thank you

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