Imperial College London



Innovation at the interfaces – a joint CaSE/Imperial event

Against the backdrop of the UK Government's R&D roadmap, there is a significant opportunity to nurture and promote UK innovation. This roundtable discussion was held on Wednesday 11 November 2020 with attendees from across the UK's research and innovation community and with officials from the Department for Business, Energy and Industrial Strategy to inform the development of the R&D roadmap. Discussions outlined some of the key features of the UK's innovation landscape and the challenges that innovative organisations face, what support is needed from the UK Government and how the UK can continue to attract investment.

This unattributed summary is not CaSE policy but will form part of our ongoing programme of work to support the development of the R&D roadmap, ultimately enhancing the environment for science and engineering in the UK.

Supporting the innovation ecosystem

Attendees were in agreement that the development of the R&D roadmap presented a great opportunity to strengthen and foster more connections across the research and innovation ecosystem. It was agreed that a long-term plan from the UK Government can help to bring clarity and consistency that private enterprise and research organisations are looking for. Attendees also noted that the current landscape of innovation support was good but often difficult to navigate, and it was hoped that the creation of UKRI could help to simplify this.

Some attendees from large businesses explained that they have a buoyant and growing portfolio of companies in which they invest that have begun to mature and continue to show promise. The companies that large businesses invest in have often grown to beyond the initial start-up or spin out phase, which underlines the importance of early-stage public funding to help businesses reach their potential that attracts investment from other private companies. Schemes such as innovation loans and the future funds business support scheme were welcomed, even though the latter was only made available to innovative businesses to try and mitigate the most severe impacts of the Covid-19 pandemic. It was felt that moving forwards, UKRI would be a more natural home for this type of innovation support than the British Business Bank.

A strong theme of the debate was that the UK already has some brilliant examples of where different organisations collaborate together and more could be done to learn from them. Attendees felt like existing organisations, clusters, Public Sector Research Establishments and others are already doing great work in facilitating partnerships. It was felt that the R&D roadmap need not create new establishments, but learn from and build existing organisations that already have a great reach into the research and innovation community. Research and Technology Organisations, who's services range from contract R&D, consultancy, incubation and financing have needed to be innovative and competitive in order to survive. It was felt that these existing organisations can be better supported and be utilized in a greater way.

The UK as an attractive destination for investment

Attendees from multinational research-intensive business reflected on the changes with regards to the R&D activities that they would undertake in-house. These attendees said that over the past decade and longer, businesses had scaled down their research activities relating to 'discovery' science, with less resource diverted to making new scientific breakthroughs. Where this internal capacity is no longer available, businesses are looking increasingly to external organisations, both other companies and universities, to build strategic partnerships. This means a major draw of the UK is the access to world-class expertise of individuals and organisations, which it was felt must be maintained. Multinational companies will make decisions to invest in certain countries where they feel is a competitive edge, whether that be an attractive tax regime, proximity to important markets or support schemes from governments. The UK's world class research base remains a competitive advantage over much of the rest of the world and is a significant reason why companies choose to locate and invest here. Against the backdrop of the UK leaving the EU, however, the UK needs to ensure it can provide the competitive offer to multinational companies.

The importance of skills

Having a highly-skilled workforce to support innovation remains key to innovative organisations. Many felt that there is too much pressure on academic researchers in particular to be excellent scientists and entrepreneurs. While some would inevitably be successful in creating innovative businesses from their research, it was agreed that more support would be required to help those looking to spin-out their ideas. With respect to interface of business and academia, it was said that often promising research is investigated by a postgraduate researcher. In some cases, particularly in the case of EU-wide schemes such as Marie Sklodowska-Curie Actions, this was a really good way of attracting and retaining talented researchers.

It was noted in countries such as Germany, many individuals were encouraged to move through business and academia, resulting in the spread of ideas and the opportunity for people to gain a wide range of skills and networks. The UK now has a Fraunhofer Institute, and such organisations can help the interconnectedness of the innovation ecosystem. The spread of opportunities for earlycareer researchers and postgraduates were also said to have a significant bearing on the UK Government's 'levelling up' agenda, providing schemes across the entire breadth of the UK can help to spread and/or retain highly-skilled workers in all parts of the country.

Summary

The discussion explored the complexities of the research and innovation ecosystem but highlights how valuable the interconnectivity of organisations across the sector are to enhancing innovation. It is vital that the UK can build a long-term vision for research and innovation that provides clarity and continuity for innovative organisations. The UK must remain a partner of choice for multinational businesses and a long-term vision can support this, along with ensuring the UK's research base remains world-class.