

Challenge-led Innovation: Delivering on the promise?

Reflections on the First Cardiff Capital Region Challenge Fund Conference

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The Cardiff Capital Region Challenge Fund recently held our first conference. At this event, academics, policy makers and practitioners came together to discuss challenge-oriented innovation and share experiences of how challenge innovation can be developed and delivered. We were extremely pleased with how the event went and participants reported very positively on the formal presentations and discussions that were held. One of our objectives in the CCR CF initiative is to build the capacity for innovation in the region and we have been working with others to develop a community of practice around challenge innovation. Given this, we were particularly gratified by how popular the event proved. We had more than 85 participants sign up with a waiting list of another 30 to 40 people who expressed an interest in attending.

Plenary One Professor Elvira Uyarra, University of Manchester

The event commenced with a presentation from Elvira Uyarra. Elvira gave an excellent overview of recent developments in innovation policy. In her presentation she highlighted a number of important issues to consider as we work towards embracing a place based and problem based approach to innovation and inclusive economic growth. Elvira differentiated between ‘accelerator missions’ which are aimed at well-developed goals and ‘transformer missions’ which are aimed at system transformation to address wicked societal problems. She explained the importance of understanding the specific problem in detail and being clear on who decides on that mission focus and on the approach that will be used. Focusing on the problem rather than existing activity can produce more radical innovation but a key issue is how to deliver more sustainable outcomes. Elvira mapped out a framework for understanding how both problem representation and solution representation maybe relatively more global or more local in nature.

Elvira then raised the importance of public procurement as a regional innovation policy tool. But she also highlighted that there are often tensions between policy goals and governance levels. There can be difficulties in identifying and prioritising long-term needs and objectives in the context of short term policy changes and the political churn. Elvira concluded her presentation with some reflection on the roles of universities and on universities may need to change if they are to contribute fully to this place-based innovation agenda.

Panel on Challenge-led Innovation from the UK and beyond: Howell Davies, Martin Doherty, Kathy Nothstine, Elvira Uyarra

We next moved onto a panel discussion chaired by Colan Mahaffey from the Cardiff Capital Region. The panellists provided perspectives on challenge innovation from the UK and beyond. The contributors were Howell Davis from Interface in Scotland, Martin Docherty from the Centre for Advanced Sustainable Energy in Northern Ireland, Kathy Nothstine from Challenge Works based in London plus Elvira. The panel produced a lively discussion

informed both by contributions from the panellists and questions from the audience. It commenced with an interesting introduction to Interface from Howell. His organization works with businesses to present challenges and opportunities to Scottish universities, colleges and research institutes to encourage innovation. They seek to work with individual businesses but also have a Sector Engagement Team which supports groups of business in three sectors – food & drink, tourism and creative industries – bringing them together with academic expertise to tackle sector-wide challenges. This is the sort of support for innovation and industry-university collaboration that is worth careful consideration in Wales as the Welsh Government reflects on how to deliver its new Innovation Strategy.

Amongst the important points made by the panellists was the observation from Kathy that there are multiple impacts of a challenge approach to innovation. The first and most obvious is of course the solutions that are developed. But second, and often equally important in Kathy's experience, is the innovators that are supported along the innovation journey and often get very good feedback and profile from participating in challenge innovation. Thirdly, challenges can contribute to more systemic change through shining a spotlight on a problem or an issue, bringing new actors together to foster bigger and more collaborative efforts. Collaboration can also leverage greater levels of funding from various sources.

Panellists also discussed other issues around delivering innovation, including innovation literacy which is often very low, the importance of building in capacity alongside the development of the challenge itself and spending time up front with the problem holders to ensure the challenge is well understood. This issue of framing was confirmed by a number of panellists' contributions as a key area for careful reflection. A related issue is the question of how tightly the challenge is framed. As Elvira noted, if it is too tight then it may be difficult to scale up any solution and the innovation that is delivered may be limited. On the other hand, if the issue is poorly framed it may be difficult to develop significant purchase amongst stakeholders and create meaningful impact. Martin gave useful insights into how he has designed roundtables for civil servants, bringing them together to talk through the issues they are seeking to address. This can help avoid siloization in government and build more coherence. In one of the final points made during the panel, Kathy identified how the urgency in getting going which may have the adverse effect of inhibiting the time taken to build understanding of the problem and bringing the stakeholders together to develop a shared sense of what can be achieved.

Panel on Future directions for Challenge-led Innovation: Kellie Beirne, Cynthia Bullock

The next panel brought together Cynthia Bullock from the Healthy Ageing Challenge run by Innovate UK and Kellie Beirne the Director of the Cardiff Capital Region. Cynthia gave an interesting presentation which mapped out the activities undertaken within the Healthy Ageing Challenge. She explained how their approach is industry-led, powered by multidisciplinary research and business-academic collaboration. It was interesting to hear that along with the challenges that are developed and supported, there is an objective to build a community of practice and develop a mix of policy instruments. Cynthia noted that the challenge has been successful in including participants from lower income groups with 80% of the projects involving such participants. Cynthia also reported that policy

fluctuations and political upheaval can prove a problem for challenge-led innovation, noting for example the uncertainty in recent times at UK government level.

Kellie outlined a number of the changes that are taking place within the Cardiff Capital Region, including arrangements to become more like a Combined Authority in England. She noted that in delivering on the objectives of the CCR, it is not sufficient to focus only on the economy. She reminded us that it may be possible to hit economic growth targets but miss the bigger point if activities are not tailored to the wider needs of society. She reminded the audience that Inclusive economic growth needs to be a means to the end of tackling social issues.

Kellie outlined anticipated moves towards a more missions driven approach in the future. She explained that the missions approach would develop connections *across* the priority clusters within the Cardiff Capital Region and also seek to build more absorptive capacity in the region. Kellie concluded her presentation with some key points which will shape how the CCR's activities develop in the future. She was keen to point out that the region needs to work in a focused way on its comparative advantages, being attentive to specific areas for investment. At the same time, she sees missions reaching beyond clusters or silos to develop a more holistic approach for the region. This will be complemented by an increasing emphasis on building an 'ecosystem approach'. She was clear that this needs to address both absorptive capacity and capability issues within the region and cannot just be based on a supply side approach. Missions need demand-led thinking. Kellie was also keen to stress that an effective approach must move past a technology-based and linear understanding of innovation. Another component of the plan involves developing evergreen investment opportunities so that the region is able to plan ahead and for the long term. This gives a financially sustainable basis for future innovation policy interventions.

Sector themed workshops

Food Sustainability: Chair Jane Lynch, presentations from Robbie Davison, Liz Lambert

Social Care: Chair Alexis Pala, presentations from Donna Coyle, Adrian Roper

Decarbonization: Chair Laura Norris, presentations by Jane Forshaw, Irfan Muhammad

In the afternoon, participants broke into three workshops which focused in more detail on key areas where challenge-led innovation has been used and/or may prove effective in the future. The workshops discussed food resilience and localising food supply, social care and the decarbonization agenda. Key points from across the workshop discussions that were brought back to a plenary debrief included the need to consider what we mean by sustainable food and who this is sustainable for; the difficulty that challenge funds may face in scaling up effective practises; and the need to bring greater coherence across local authorities. Another issue that was raised during the workshops was the question of citizen engagement and how to bring people along with the initiative when seeking to develop solutions to these key challenges. It was generally felt that it was important to gather information and opinions and create opportunities to participate at the draft ideas stage so that there was a degree of involvement early and the potential for behaviour change was reflected upon alongside other aspects of how to develop challenges.

Professor Lars Coenen, Western Norway University of Applied Sciences

Our second plenary speaker was Lars Coenen. His presentation focused mostly on the role of experimentation in policy development and in particular with regard to the design of missions. He reported on a recent experience at a conference where participants with expertise and experience in these areas reported that living labs and experimentation were now the two most significant responses in terms of delivering sustainability transformations. While still significant, smart specialisation and clusters were seen as secondary to this new emphasis on experimentation in policy making. One of the key advantages of experimentation is that it can translate long-term future visions into immediate actions. As Lars indicated, this may need a more mature understanding and approach to risk than has often been the case in the past. And can prove particularly difficult to deliver for public sector organizations. Experimentation by definition means failing as well as succeeding. Lars reminded us that nine out of 10 innovation projects fail and also that serendipity is a crucial part of innovation.

The question of citizen engagement also featured in Lars' presentation and he gave an example of where a decarbonization mission had included experimentation at the street level. This brought the activity right to the level of the street and engaged citizens in questions of how to contribute to meeting net zero targets. In the final part of his presentation, Lars mapped out some of the characteristics of transformative innovation policy. This needs to take a process-oriented approach which involves social and higher order learning as well as also needing to reflect some key basic values that can contribute to increased adaptability and shared understanding of what is required. As he pointed out, to make this approach work has profound institutional implications and one must develop the capacity to learn from failure. Institutional capacities are required in order to orchestrate and monitor experimentation. Here the quality of multi-level governance and of diagnostic monitoring is crucial.

In conclusion

From my point of view, there are some key issues that one can take forward as we seek to develop the capacity and capability to deliver challenge-led innovation. I would put a particular emphasis on the importance of taking a place-based, problem-based approach. However, as colleagues reflected during the various contributions, this brings certain tensions.

1. Time and the pace of attempted change. There was a call both for patience and a move away from short-termism. At the same time, there is an urgency in our need to address some very pressing societal problems.
2. There is an enduring challenge in getting the right scale of ambition and seeking a breadth of impact while developing sufficiently focused and locally well-informed initiatives.
3. Mobilizing key and powerful actors is crucial in seeking to create meaningful and systemic change but this can work against the equally important desire to be inclusive and reach the peripheral and disenfranchised in our societies.

What does this mean for practice? To my mind, these are tensions that cannot necessarily be resolved. But we can determine some implications of which to be mindful:

1. Take the necessary time to fully frame the problem, develop a sense of shared enterprise and build local capability.

2. Take an intelligent approach to the data and actionable insight that are required to inform action. To avoid hitting the target but missing the point, we need to design measurement and evaluation that is informed and tailored to the specific theory of change and objectives of a particular initiative.
3. Success will take collaboration and thought needs to be given to how that collaboration is developed and structured. There remain questions over whether our existing institutions are appropriately designed to deliver effective partnerships as mechanisms for change.