

Efficiency for Access Design Challenge: Connecting Academia and Industry

Summaries from the workshop hosted on the 29 May 2020



Recognising the opportunities to link academic and industry partners in an off-grid context, the Efficiency for Access Design Challenge team hosted an online workshop to understand the benefits of these connections, as well as identify what's needed for establishing long-lasting, productive partnerships. Below we share the key takeaways from the discussions.

Spotlight: the collaboration between UCL and BBOXX

Our speakers, Dr Priti Parikh and Dr Iwona Bisaga presented on the UCL and BBOXX partnership, how it works in practice, its benefits and linked challenges. Working together since 2015 to jointly tackle the challenge of reaching universal electrification by 2030, UCL and BBOXX work together in the following ways:

- BBOXX handle the data, operational expertise and access to customers. UCL have the resource scope to undertake critical research.
- The partnership with UCL allows them to expand the reach on energy access products and enable more informed business investment decisions.
- The UCL EfID (Engineering for International Development) team bring a valuable experience in both academia and the private sector to effectively combine engineering solutions with social sciences findings

Key lessons from the BBOXX & UCL Collaboration:

1. Developing and sustaining collaborations is a process/journey and not an end-product
2. It takes time to build trust
3. It is better to start work on small pilots to understand values and mission before embarking on large projects
4. Transparency and communication are vital for a productive collaboration
5. Collaboration is about people and developing productive careers

The slides from the presentation are available [here](#).

Key takeaways

During the workshop, representatives from companies and universities broke out in groups to discuss about why partnerships are so important and what makes them successful.

What is the added value for academia of a partnership with an off-grid company?

- It is an opportunity for students to connect in a real-world context and develop their skills by working practically and seeing the potential impact.
- A tangible way to ensure sustainable development is a core part of education (i.e. project based learning on this rather than just theoretical).
- Learning on impact and both the responsibility of ensuring meaningful work and recognising potentially dangerous or high-risk practices
- Ability to motivate students by connecting them to a wider community and global vision
- Students may be unaware of the market and what the business is about; they can utilise strengths of the business and those who know how to do research. Effective pipelines for concepts to reach the marketplace
- Academics are not necessarily experts in business practices, so expertise can be sought
- Opportunity for meaningful research and PhDs

What is the added value for an off-grid company of a partnership with a university?

- Industry could get added value for customers if universities provide insight from real-time data. Researchers are impartial and not led by profitability, which ultimately benefits the end-users.
- Many off-grid businesses such as BBOXX, Innovex Uganda or Solar Cooling Engineering or were started by students. Partnerships will support the development of start-ups that could form in an academic context.
- There is a holistic benefit to having shared data and research that is market applicable. It is more likely to happen through universities.
- Innovation is key to the success of the off-grid sector.
- Industry could benefit from resources (such as labs) provided by universities
- Universities have access to motivated groups of students that will add value to a partnership
- Universities can have access to funds for research that companies may not be able to.

Key actions for a successful partnership

1. Transparency from one party to the other about their desire to connect.
2. There is **an important need for these relationships to be facilitated**.
3. It is important to **understand the cultural differences between universities and companies** in order to enable successful partnerships.
4. We need to **share learning from examples of successful partnerships** in order to change attitudes or existing assumptions of each other.
5. Ability to ensure knowledge and experience is learned by more than just the individual involvement. **Management systems are required to capture and manage knowledge**. During the breakout discussions, a point was made that a lot of knowledge is lost or unused without this.
6. **Be upfront and transparent about who owns what, e.g. Intellectual Property (IP). It was discussed that IP** should be shared, or open source through creative commons licensing, when working in collaboration. Both parties tend to retain IP of previous knowledge/work.

Next Steps

If there is an Efficiency for Access Design Challenge industry partner or academic that you would like to collaborate with, or if you want to participate in the Efficiency for Access Design Challenge, please get in touch with us: EforAchallenge@est.org.uk.