OPEN INCLUSION
AN INCLUSIVE DESIGN
CASE STUDY

"Inclusive design is about understanding the variety of human condition - personal needs, preferences, skills, context and adaptation." -Dr Vanja Garaj (Head of Design)







co-innovate

Overview

Scaling up collaboration in immersive tech Brunel Design School collaborates with industry to develop solutions for inclusive design of the immersive reality—in the areas of broadcast content, gaming and education.

In the spring of 2018 Brunel Design School and Brunel Co-Innovate Journeys initiated a collaboration with Open Inclusion, a London-based consultant specialising in inclusion research. Open Inclusion is a specialist user insight and inclusive design consultancy managing a UK-wide user panel of over 350 people from across the UK with access needs, disabilities and older age. Through Brunel's Research Support Development Office (RSDO) that runs the innovation vouchers scheme, Dr Garaj was able to initiate the collaborative process with Open Inclusion using an initial grant of £5000, which was awarded under the Innovation Voucher Scheme operated by RSDO for the research support. The scheme has been developed by Brunel University London to provide the seed funding leading to larger projects.

The preliminary work included scoping the opportunities and building a network of partners to attract funding for longer-term projects focusing on the inclusive design of the immersive reality - with the view of enabling Open Inclusion to build the relevant consultancy capacity and expand their business platform.









Despite the development of immersive technologies being a priority of the UK Industrial Strategy, inclusive design for the immersive tech is still a largely under-explored area.

Brunel Design School and Open Inclusion are addressing this gap with a ground-breaking partnership. The next step forward was a joint funding application to Innovate UK's Audience of the Future: Design Foundations fund. In addition to Brunel Design and Open Inclusion, this application involved Channel 4. The application was successful and the funding of ca. £60,000 was granted for a 6-month project to develop inclusive design solutions to improve access to 360° videos for users with motor, perceptual and cognitive impairments and disabilities and older users.



"INCLUSION IS FOR EVERYONE. WE ALL EITHER HAVE CURRENT ACCESS NEEDS, OR ARE TEMPORARILY ABLE-BODIED AND WILL HAVE NEEDS IN THE FUTURE"- OPEN INCLUSION









Following the Innovate UK success another funding application was made to the Engineering and Physical Sciences Research Council's (EPSRC) Digital Economy Investigator-led Research Projects fund. For this call the partnership between Brunel Design and Open Inclusion was expanded to include Cambridge Engineering Design Centre, Games London, To Play For, Virti Health and RNIB.

The successful application generated a grant of ca. £600,000, which enables the consortium to work on a 3-year research project to develop the Inclusive Design Toolkit for the Immersive Reality.

The collaboration between Brunel Design School and Open Inclusion and the related project work have been managed by Dr Vanja Garaj, Head of Brunel Design and Project Leader for Co-Innovate.

"Inclusive design has been a topic of research within design for many years. But applying inclusive design in the context of immersive technology has been relatively new, it is novel research. As an academic you always want to do something that hasn't been done before and that can potentially benefit people and in this case people with disabilities"

Dr Vanja Garaj - Head of Design









THE IMPACT OF THIS COLLABORATION

The project will improve the levels of inclusion across the disability and age spectrum for broadcast, gaming and education content in VR, AR and MR. As such, considering that the population of people with disabilities in the UK amounts to more than 11 million and those over the age of 65 to more than 11.5 million, the project has the potential to make a significant contribution to enlarging the immersive tech sector of the UK economy. Working on projects involving immersive technology opens gates of opportunities for students who are willing to work in this area and explore this area of research.

"Sharing research knowledge with students is always useful. Addition of the Digital Media Division into the Brunel Design School has expanded the spectrum of possibilities for academics and students.

Digital Media students can work on AR/VR/MR related projects in collaboration with such companies."

Dr Vanja Garaj- Head of Design











About Co-Innovate Journeys

Jointly funded by Brunel University London and the European Regional Development Fund, Co-Innovate Journeys provides support to SMEs, connecting London-based SMEs trading over 18 months with academic expertise and research practices at Brunel University London. Brunel University London's Co-Innovate programme is currently funded until March 2023 enabling Brunel to continue to link research with real world businesses and provide innovation and growth to business. The project provides the tools and support necessary to help business:

- innovate
- differentiate
- create new products and services through collaborative projects with academics and students.

The benefits for our academics: Having access to a range of SMEs with innovative projects that could lead to research in your chosen areas of science, engineering, technology, business and design, or give your students live projects with real businesses.









Benefits for Academics

- Work with a range of early life businesses on projects in which you can apply your academic knowledge and professional experience to a reallife business situation
- Have real business projects your students can work on to help towards their learning and end of year marks. Know a student with a business?
- Having access to a range of SME's with innovative projects that could lead to researching your chosen areas
- Give your students live projects with real businesses.

Benefits for Students

- Exposure to company working practises, working to deadlines and defined constraints
- Develop the skills and experience you need to stand out in the job market
- Build industry links and enrich your academic learning by developing a specific design or business concept

Benefits for SMEs

- Providing the tools and support necessary to help your business innovate, differentiate and compete successfully in the market through collaborative projects with academics and students
- We can help you identify and create new value and achieve growth.
- Access to free tailored Workshops and Support Programmes
- Access specialised support teams such as RSDO, a team focused on identifying and assisting the development of research funding applications.









Why get involved with Co-Innovate?

- Access a range of businesses to collaborate with and be part of the team that supports and provides real value to the businesses based in London
- Do you have capacity to volunteer your time to provide expertise in your subject matter to support SME's contact Co-Innovate Journeys
- If you are an SME and have a business challenge and are seeking a fresh perspective on your business problem then get in touch with us to receive free consultation and support.

Businesses we work with are:

 Small and medium-sized enterprises (SMEs), start-ups or sole traders registered with Companies House or HMRC (for sole traders) based in London



For general enquiries please email us at: Co-Innovate@brunel.ac.uk

For more information visit our website: www.brunel.ac.uk/co-innovate







