The Changing Innovation Landscape: Challenges for Collaborative Design

Overview

New innovation landscapes have radically changed and advanced collaborative practices in order to develop more user-centred, innovative and customised products in a timelier manner. This has in turn prompted a motivation for industry to adapt their organisational practices to remain competitive.

This innovation landscape is characterised by the use of information systems throughout the innovation process to support stakeholders in manifesting and brokering product development knowledge. The innovation process is discontinuous, dispersed and open which in turn creates opportunities for new business models and markets. The product development process is democratised and adopts dynamic capabilities to radically innovative and sustain competitive advantage. Cloud-based methods, redistributed manufacturing, Industry 4.0, and Open Innovation are representative of the methods used to drive research within this innovation landscape.

These characteristics present complex challenges to conventional industrial practice and confounds the benefits gained from wide-spread implementation. These challenges could for example relate to the complexities of extending knowledge management practices beyond the boundaries of the organisation and the subsequent manipulation of this knowledge; the operation of formal and informal collaborative networks that manages ambiguity, equivocality, and conflicting constraints; the adaptation of organisational structures to become more flexible, agile and open; and the ownership of the product development process.

This workshop will bring together collaborative design and innovation researchers with the aim of creating a coherent, integrated, and more holistic picture of the collaboration challenges within this open innovation landscape.

The workshop is aimed at industrial and academic researchers and practitioners with an interest in Collaborative Design and Innovation. The outcome of the workshop will benefit both domains of researchers by forming the foundation for establishing international relationships.

This workshop will be run by the Collaborative Design SIG. The workshop will be chaired and co-chaired by Dr. Avril Thomson and Dr. Ian Whitfield, and facilitated by Mr. Ross Brisco.

This workshop will aim to answer the questions:

- How is this changing innovation landscape characterised, and what are the benefits to industry of adopting these innovation practices?
- What are the challenges and contradictions that confront industry in adopting these practices?
- Can these challenges be consolidated into research themes, and what pockets of research should be integrated into these themes?