



OVERVIEW

AS TECHNOLOGY AND THE EMERGENCE OF DEVELOPING ECONOMIES INCREASES GLOBAL COMPETITION, DESIGN IS RAPIDLY GROWING IN IMPORTANCE FOR UK INDUSTRY. UNFORTUNATELY MANY COMPANIES DO NOT ACKNOWLEDGE THE VALUE OF DESIGN AND, THOSE THAT DO, FACE DIFFICULTY IN MEASURING THEIR DESIGN PERFORMANCE. NOT ENOUGH ATTENTION IS PAID TO PERFORMANCE MEASUREMENT OF THE DESIGN PROCESS AND WHAT RESEARCH EXISTS IS FRAGMENTED ACROSS DIFFERENT DESIGN COMMUNITIES. THE AIM OF THE DESIGN PERFORMANCE CLUSTER WAS TO FACILITATE INNOVATIVE, CROSS-SECTOR NETWORKING, ALLOWING INTERACTION BETWEEN DIFFERENT DESIGN COMMUNITIES. THE RESULT WILL BE A CONTRIBUTION TO COMPETITIVE DESIGN ACTIVITY BY FOCUSING ATTENTION ON DESIGN PERFORMANCE.

THE CLUSTER PROVIDED A PLATFORM FOR A MULTI-DISCIPLINARY GROUP OF RESEARCHERS WITH EXPERIENCE IN DESIGN PERFORMANCE TO DISCUSS AND SHARE KNOWLEDGE. PARTICIPANTS CAME FROM A BROAD RANGE OF DISCIPLINES AND UNIVERSITIES THROUGHOUT THE UK INCLUDING STRATHCLYDE, DUNDEE, CRANFIELD, NOTTINGHAM, LOUGHBOROUGH, CAMBRIDGE, AND EAST ANGLIA.

Activities

A series of workshops was held in Glasgow, Cranfield and Cambridge, followed by a review meeting in Glasgow in December. At these meetings, cluster members were able to share their understanding of design and performance measurement from studies within their field.

At the first meeting cluster members presented relevant current work, demonstrating the diversity of disciplines and approaches. At the next meeting there was development of themes and the research agenda along with a SWOT analysis identifying key areas of focus. At the later meetings the focus turned to identifying specific research questions and topics for study. Out-with the meetings, there was consultation of experts to test the group's findings and proposals for further work.

Insights

These meetings proved fruitful in helping to identify the key issues to be addressed and areas where research is required. Outputs from the cluster discussions will include representation in a number of conferences and publications. These include submissions to PMA and EUROMA conferences and editing a special edition of the journal of Research in Engineering Design on Design Performance, for which all submissions are welcomed.

The group also intends to conduct a number of research projects taking a multi-level approach towards design performance measurement. These will include:

- Design Score Board – based on R&D scoreboards a comparison of design performance at a national level
- Design Score Card – based on the Balanced Score Card, a system of design performance measurement at a firm level
- Design Dash Board – a tool for design performance management at a project level

Additionally, another study will look at the UK's Key Design Performance Challenges, using a multi-disciplinary, collaborative investigation to produce a map of relationships between key challenges across a number of design domains. Participants from other clusters and beyond who can contribute knowledge and expertise from their field of design are being actively sought for this project.