



SCOTTISH **DESIGN WORKSHOP**

Report of the 1st Scottish Design Workshop

Friday 29th August 2025

The Department of Design, Manufacturing and
Engineering Management, University of Strathclyde,
Glasgow, UK

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Delegate List

Name	Organisation
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Alejandro Moreno-Rangel	University of Strathclyde
Amanda S. Bradburn	University of Edinburgh
Amy Grech	University of Strathclyde
Bettina Nissen	University of Edinburgh
Cameron Brown	University of Strathclyde
Costas Petrakis	University of Strathclyde
Cristina Gonzalez-Longo	University of Strathclyde
Donald Robertson	University of Strathclyde
Elena Dumitrana	University of Bath
Esmail Khedmati Morasae	University of Strathclyde
Freddie Holliman	University of Strathclyde
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Ian Edgecomb	University of Strathclyde
Ian Whitfield	University of Strathclyde
Inge Panneels	University of Edinburgh
Jay Bradley	University of Glasgow
Kieran Gunn	University of Strathclyde
Lisa McCann	University of Strathclyde
Mags Watson	University of Strathclyde
Margaret Cunningham	University of Strathclyde
Martin Boyle	The Solutions on Demand Group
Matthew Love	Mage Control Systems Ltd
Praveen Ashok	NovoSound
Parastoo Zali	University of Strathclyde
Rachel Ward	University of Strathclyde
Robert Lynch	National Manufacturing Institute Scotland (NMIS)
Ross Brisco	University of Strathclyde
Ross MacLachlan	University of Strathclyde
Ryan McGinley	PA Consulting
Ryan Mitchell	The Solutions on Demand Group
Sam Lloyd	University of Strathclyde
Samir Soares	PNDC
Sandra Benbow	Defankle
Sandy Robinson	Scottish Government
Sarah Jayne Hamilton	University of Strathclyde
Seona Adam	Freelance Designer
Shyam Narayanan Viswanathan	University of Strathclyde
Steven Birnie	University of Strathclyde
Stuart Kelly	Systolic
Tijana Vuletic	University of Glasgow
Tom Hay	University of Glasgow
Tristan Elliott	i4 Product Design
William Vieira De Souza	University of Strathclyde
Xin Yi	Accenture

Summary of the event

The Scottish Design Workshop took place on the 29th August 2025 at the Department of Design, Manufacturing and Engineering Management (DMEM) at the University of Strathclyde in Glasgow, UK. Inspired by the long-running Clive L. Dym Mudd Design Workshop and the Canadian Design Workshop, the Scottish edition was established with the ambition of strengthening ties between academics and practitioners, encouraging collaboration across disciplines, and tackling some of the most pressing challenges in design and engineering. Endorsed by the Design Society, the event set out to create an environment where new partnerships could form, particularly among early- and mid-career researchers, while also providing opportunities for mentorship, professional development, and collective problem-solving.

The workshop was structured around three major themes: artificial intelligence, sustainability, and healthcare. Each explored in a ninety-minute workshop session chaired by subject specialists. Dr. Tijana Vuletić of the University of Glasgow led the session on artificial intelligence, where participants examined how AI can enhance design efficiency, optimize processes, and improve collaboration across different stages of the design cycle. Sustainability was guided by Dr. Steven Birnie from the University of Strathclyde, who steered discussions on life-cycle thinking, energy efficiency, materials choice, and strategies for waste reduction. The healthcare session, chaired by Tristan Elliott of i4 Product Design, focused on how design innovations can improve patient well-being, streamline clinical workflows, and promote safer, more effective interdisciplinary collaboration in medical contexts.

Throughout the day, the workshop's format encouraged open dialogue and creative exchange. The sessions were deliberately interactive, designed not only to discuss challenges but also to spark the formulation of joint research proposals that could be taken forward to funding applications. This emphasis on tangible outcomes gave the event a strong sense of momentum and purpose, ensuring that discussions did not remain abstract but instead pointed toward actionable collaborations.

By bringing together 43 delegates from academia, industry, and design practice, the Scottish Design Workshop successfully cultivated a network of people committed to addressing “wicked problems” that extend beyond disciplinary and institutional boundaries. Attendees left with a clearer sense of shared priorities and potential projects, as well as with new professional connections that are expected to support longer-term collaboration. The setting at DMEM, University of Strathclyde, proved an ideal venue, reinforcing Glasgow's reputation as a hub for design and engineering innovation.

The event concluded with a strong sense of optimism. The combination of thematic depth, interdisciplinary dialogue, and practical orientation made the Scottish Design Workshop not only a forum for exchange but also a catalyst for new research partnerships that will continue to evolve in the months and years ahead.

The organisers plan to conduct the next Scottish Design Workshop in 2027 and welcome any feedback or suggestions to support the success of the next event.

Summary of the delivered content

Workshop One: Artificial Intelligence

This workshop lasted 1 hour 30 with discussions and activities focused on AI. The session was hosted by Dr. Tijana Vuletic and featured presentations by Dr. Ross Brisco, Dr. Freddie Holliman, Dr. Tijana Vuletic, and Dr. Abi Hird.

The workshop included presentations on project examples and three main activities:

- An activity to discuss the "Knowns and unknowns of AI, experiences and challenges"
- An activity to map AI challenges to current design challenges
- A group sharing session to present findings

Discussion included:

- To what extent can publicly available text-to-image AI systems generate images of concepts that support the interpretation of concept ideas to inform decisions about concept selection in engineering design?
- What are designers' perceptions of the generated concept images and the potential role of text-to-image AI in the design process?
- How well can current generative AI technologies perform at initial concept image generation in product development?
- To what extent do novice designers consider current AI technologies as an alternative to sketching?
- What understanding do novice design students have on current design-related AI technology?
- To what extent do novice design students understand the subject of intellectual property as it relates to design?
- What are the barriers to AI use in a professional design job?
- What problems, if any, do you think there are in general to using AI tools in the design process?
- What is the potential of AI to support mechanical design development and what level of trust is placed on its outcomes?
- How reliable can AI be?
- What is its objective usefulness?

Workshop Two: Sustainability

The sustainability workshop was hosted by Dr Steven Birnie and featured speakers Dr. Cristina Gonzalez-Longo, Ryan McGinley, Dr. Inge Panneels, and Rachel Ward.

The main activity for this workshop was to define a sustainability problem, which was followed by a discussion of the methods of investigation and the output and impact of the solutions.

Examples included:

- The design of a Primary School.
- A novel design for the return of drinks packaging.
- The use of mapping to understand social and ecological ecosystems of local supply chains.
- Digital Product Passports for real-time environmental data monitoring.

Workshop Three: Healthcare

This workshop was led by Tristan Elliott in the form of a , with speakers Dr. Praveen Ashok, Stuart Kelly, and Amanda S. Bradburn. The primary activity involved teams considering challenges facing healthcare and proposing interventions to overcome them.

The discussion in the room was fruitful with current challenges and the need for greater collaboration across boundaries that Design can play a crucial part in solving.

The workshop ended by asking delegates to consider the challenges facing healthcare, and to consider interventions to overcome these challenges.