CINet Conference 2022

Pursuing Innovation for a Smart & Sustainable Future

SPECIAL TRACK

PURSUING SUSTAINABLE DESIGN-DRIVEN INNOVATION

The transition to a more sustainable economy and society is at the heart of the political, social and economic policies for Europe in line with the goals of the 2030 Agenda and the EU Next Generation Recovery Plan. Developing a sustainable approach as a whole - intertwining economic, environmental, and social goals - requires more sustainable innovations (Nidumolu et al., 2009; Hopkins, 2010; Schaltegger & Wagner, 2011).
Responsible innovation, eco-innovation, green innovation are just a few examples of recent topics focused on innovations that are safe for the environment. In a broader sense, the circular economy in line with the European Green Deal is based on the idea that products need to be designed for closed loops, as well as be adapted to generate revenues (Bocken et al., 2014).

As a result, designers today have a greater responsibility than in the past in the way products and services are built. They should move from traditional model "take-make-dispose" to a more restorative, regenerative and circular economy considering the effects from a whole system perspective (Charnley et al., 2011). Even though terms such as "eco-design", "green design", "design for environment", "sustainable design" and "circular design" have emerged in the last decade, designers still have little guidance to design for new circular economy in practice (Dekoninck et al., 2016).

It is widely recognized that design as a source of product innovation greatly impacts on competitiveness (Moultrie et al., 2007; Verganti, 2008, 2009) and that new and original products created with designers integrate functionality, technology, aesthetics and meanings (Bloch, 2011; Verganti, 2009), thus satisfying customers looking for high quality products, as well as abundant hedonistic and semiotic benefits (D'Ippolito, 2014; Luchs & Swan, 2011). However, only recently sustainability has been explicitly recognized by entrepreneurs an important attribute of new design product development which creates value for customers (Conti et al., 2019). Hence, good design practice should consider sustainable issues connected to product design (use of recyclable materials, product durability and reliability, low consumption, etc.) as key elements of competitiveness (Bumgardner & Nicholls, 2020).

To produce new radical innovations companies need to build relationships and a continuous dialogue with an exclusive circle of actors or "interpreters" (designers, artists, suppliers, companies of other sectors, etc.) which facilitates a more holistic interpretation of the surrounding sociocultural arena and contributes to develop ideas, insights and new products with new meanings for users and customers (Verganti, 2008, 2009, 2017). This concept, as widely accepted in the design driven innovation literature, gets more and more strategic when it comes to including sustainable issues in this frame, as these issues surely impact on innovation network structure, internal organization and skills.

Design is being also affected by digitalization (Cantamessa et al., 2020). For example, in AI-powered organizations the role humans (of designers) has been partially replaced by machines. Since this new practice is gaining traction also in industries based on physical products (Verganti et al., 2020), investigating how digital technologies may help to develop sustainable design-driven innovations might open new intriguing avenues of research.

Pursuing Sustainable Design-driven Innovations to build a smart and sustainable future surely deserves increasing attention in Innovation Management studies. Thus, this track focuses on the relationship between sustainability and design driven innovation as a stream of literature that requires more attention and should be further explored. To this aim, authors are encouraged to present and discuss the latest innovations, trends and solutions in the areas of Sustainable Design-driven Innovation. Papers could adopt either theoretical and conceptual or empirical analysis (qualitative or quantitative methods) using the most suited methodology.

Suggested topics include, but are not limited to, the following:

- Sustainable innovations and design practice
- Enablers and barriers of sustainable design-driven innovations
- Demand for sustainable design-driven innovations
- Customer involvement in sustainable design-driven innovation
- Collaboration in sustainable design-driven innovation ecosystem
- Organizations and competences for design-driven innovation
- The impact of digital technologies on sustainable design-driven innovation
- The role of policy and regulation for the implementation of sustainable design-driven innovation

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Co-Chairs

Emanuela Conti is Assistant Professor of Economics and Business Management at the Department of Economics, Society, Politics at the University of Urbino “Carlo Bo” where she teaches Business Communication and Internet Marketing and Economics and Business Management. Her main research interests focus on management of cultural and creative industries, museum marketing, experiential marketing and design driven innovation. She has published on these topics on national and international journals and in conference proceedings. She received 2019 Emerald Literati Award “Highly Commented Paper”.

Anna Codini is Associate Professor of Management at the Department of Economics and Management of the University of Brescia (Italy) where she teaches Innovation and Operations Management and International Business. Her research interests refer to Innovation Management and Sustainable Production and Consumption. On these issues she has published a book, chapters in national and international books, and papers in journals, as Knowledge Management Research and Practice, Journal of Business and Industrial Marketing, International Journal of Consumer Studies and European Business Review. She has been involved, as presenter and chairman, in several national and international conferences and in several national/international research projects.