Driving Future Design Paradigms through Integrative Innovation

Since its inception, BIG.D has adhered to the core philosophy of "BIG DESIGN," establishing a cross-disciplinary platform for academic exchange. The journal focuses on how design can integrate with scientific research and industrial practice to generate forward-looking innovation paradigms in response to complex global challenges.

This issue highlights the value of cross-disciplinary design in areas including health technology, artificial intelligence, smart cities, art–technology integration, and social equity. A key feature is the deep collaboration between academia and industry, with several contributions originating directly from practice. These studies demonstrate how academic insights can be rapidly translated into applications and, in turn, inform theory, underscoring the role of design in fostering an innovative ecosystem.

Emerging trends in cross-disciplinary design are evident in three domains:

Technology and health: Intelligent systems and sensor technologies are reshaping healthcare and human–computer interaction toward precision and user-centered design.

Artificial intelligence and societal governance: AI offers efficiency gains while raising adaptation and ethical challenges, requiring collaborative responses from design and social sciences.

Art and humanities: Innovation increasingly integrates culture, experience, and social well-being, expanding the boundaries of design practice.

Looking ahead, cross-disciplinary design innovation is expected to advance by promoting evidence-based research, deepening academia–industry collaboration, and reinforcing design's role in social responsibility and sustainable development. These trends are poised to shape new research paradigms and inform global problem-solving strategies.

The contributions in this issue also provide tangible support for the United Nations Sustainable Development Goals (SDGs). From health and well-being (SDG 3) and industry innovation (SDG 9) to sustainable cities (SDG 11), reduced inequalities (SDG 10), and social justice (SDG 16), the approaches presented demonstrate design's pivotal role in advancing global sustainability. BIG.D will continue to foster cross-disciplinary dialogue and collaboration, facilitating globally impactful design innovations for a smarter, healthier, fairer, and more sustainable world.

The Editorial Board of BIG.D

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