

Preface

During my long stint with the World Design Organization (WDO), I led several programs and have been fortunate to meet with brilliant people from across the world, design educators, product designers, urban planners, city officials, students with varied cultural and linguistic backgrounds. These experiences have given me a clear understanding of 'transformation' and 'systemic approach' to global challenges. Transformation is the magic word that is surrounding everything we do in our day to day lives! It is also a constant factor in our lives. Be it the ugly *COVID pandemic* or the mysterious *AIGC* humans are learning to successfully 'transform' to a new normal life by making some adjustments to our behaviors. Transformation is currently the most spoken and written topic in the world and this book captures the role of design in facilitating systemic transformation as we adjust ourselves to such change. This book is an excellent collection of expert design topics addressing transformation from multiple perspectives.

The book opens with Authors Broadbent and Ferraris giving their views on the systemic transformations and state that the most sig-

nificant transformation in the last few decades is the integration of human centered approach to design and how interactive design leads to participatory design in almost all facets of design. The Authors also substantiate their statements with a long list of references from well-known designers and authors.

In Chapter 1, Luca Casartelli and Giuseppe Andreoni explain how understanding neurosciences helps designers design better. They present evidence in the form of User eXperience (UX), emotions, affordance and motor planning, User Interface (UI), and memory management, all factors that relate Design to Neuroscience. The Authors conclude that a stronger synergy in neuroscience and design is a promising approach to offer scientific evidence to good design and a better world.

In Chapter 2, Stefana Broadbent presents how «Feminist design is emerging as an alternative voice that can bring together social justice, environmentalism, policy and post colonialism». In conclusion, the Author says, «the model of decentralized, localized, just and pluralistic forms of management proposed by feminist theories can constitute a roadmap for expanding the scope of participatory design».

In Chapter 3, Authors Marco Ajovalasit and Joseph Giacomini show how the design parameters have changed to experience and meaning rather than functionality or interactions. The *Design for Meaning* framework proposed offers a design culture where individuals embrace change and create a foundation for a long-term transformation.

In Chapter 4, Author di Margherita and Isabella Ruina aims to examine the sources of stress in working environments, especially in the healthcare industry. The Author presents a series of examples and research to show how important it is to improve the work environment and reduce stress to promote healthy life-styles.

Chapter 5 deals with the data for urban biodiversity, a topic that is very relevant as the society is redefining its relationships with nature and the planet more than ever before. Authors Gabriele Colombo and Andrea Benedetti takes the reader through few data visualization models and dashboards that can be helpful as tools for the public engagement for urban biodiversity.

Chapter 6 describes how Computational Design is changing with the advent of AI and how to manage complex parameters through

simulated three-dimensional environments. Author Giorgio Buratti takes us through the maze of algorithms and computational design models using AI tools.

Chapter 7 presents interesting data on how games have become more important in the scientific study of complex human behavior beyond children. Author Maresa Bertolo shows how games can help assess cognitive and behavioral factors of humans.

Chapter 8 is one of my favorite sections of this book. It deals with challenges in product development in the current era. Prof. Silvia Ferraris takes us from the days of Industrial Revolution where the focus was on industrial design to how human centered design factors have become inclusive of product development today. This chapter also shows how design methods are changing with the introduction of AIGC and other technologies.

Chapter 9 examines two key concepts, meta design and inclusive design. Meta-design seeks to turn complexity into opportunity for innovation. Authors Venanzio Arquilla and Federica Caruso present the value of meta-design in the design process through a set of tables. They also trace back the origin of Inclusive design to 1950 when design for specific disabilities were produced to benefit segments of the society. The Authors also present the evolution of inclusive design today with good examples.

In Chapter 10, Author Carla Sadini presents an interesting topic *how does design deal with complexity* and proceeds to get the opinions on design transition, design culture, design's impact on society from well-known design experts, product and service design, design historians and journalists. It must be noted that the conclusions were arrived with the help of ChaGPT!

Chapter 11 deals with Design Thinking and the role of startups in Innovation. Authors Gianluca Carella, Francesco Zurlo and Svafa Grönfeldt present that innovation is the primary catalyst for regenerating and expanding economies in a highly complex business environment. They quote (Luger and Koo, 2005) that startups are the key drivers for technological innovation, economic agility and job creation. The Authors present various approaches of design thinking that can help startups to innovation and avoiding failures. A good lesson for modern day business practice.

Chapter 12 stresses the need for supporting social innovation. Author Marta Corubolo shows how Cities and governmental bodies recognized design for social innovation in Italy where the citizens were encouraged to be eager and experiment ideas for sustainability and inclusive ways of living in uncertain times. He also gives an example of the school of neighborhoods in Milan to stimulate and enable innovation.

Srini R. Srinivasan
President Emeritus & Senator
World Design Organization