

One Page Summary for my presentation “Grand Challenges for QoL-based Design Strategies“

A *grand challenge* defines a commitment by a scientific community to work together towards shared valuable and achievable goals, to transcend boundaries, and to envision fundamentally new objectives. Creating a transformative framework to foster, nurture, and support “Quality of Life (QoL)” is one of the most challenging design problems of the digital age. QoL is a broad concept without a precise, generally accepted definition. In design, trade-offs are universal because there are no best solutions independent of goals, objectives, and values, specifically for systemic, ill-defined, and wicked problems such as QoL.

The presentation will explore and summarize design trade-offs, insights, and arguments to articulate requirements for the design of socio-technical environments to address grand challenges for human-centered design grounded in a QoL perspective. QoL as a concept transcends the domain of Information and Communications Technology (ICT) (e.g.: the QoL objectives articulated in “Europe’2020” include: democratizing societies, supporting employment and social inclusion, improving health-care, supporting energy and environmental sustainability). Information and computing technologies have the potential to contribute to QoL objectives (with objectives such as value-sensitive design and positive computing in almost all human activities. ICTs have made tremendous progress over the last decades with huge impacts. But applying new technologies does not necessarily lead to an improvement of QoL. Faced with the fundamental, ubiquitous and global impact of digital technologies it is time to go beyond analytical post analyses of risks and benefits and explore the design challenge that more efficiency and productivity does not necessarily increase the “quality of life” for all of us? The Figure below attempts to create an initial framework for QoL illustrating different aspects. An important objective of QoL is to prioritize human well-being with technology. Values and positive attributes of QoL are not universal, but specific to problems, design objectives, tasks, and user communities.

Design trade-offs are important because *the future of the digital age is not out there to be discovered but is has to be designed*. Technologies developments are not inevitable and the human-centered design community should demonstrate that design alternatives are possible. As researchers we need to explore and understand the implications of design trade-offs and engage multiple voices in constructive controversies.

