

Cultures of Participation in the Digital Age: From “Have to” to “Want to” Participate

Barbara Rita Barricelli

Università degli Studi di Milano
Milano, Italy
barricelli@di.unimi.it

Gerhard Fischer

University of Colorado, Boulder
Boulder, Colorado, USA
gerhard@colorado.edu

Daniela Fogli

Università degli Studi di Brescia
Brescia, Italy
daniela.fogli@unibs.it

Anders Mørch

University of Oslo
Oslo, Norway
anders.morch@iped.uio.no

Antonio Piccinno

Università degli Studi di Bari
Bari, Italy
antonio.piccinno@uniba.it

Stefano Valtolina

Università degli Studi di Milano
Milano, Italy
valtolin@di.unimi.it

ABSTRACT

New levels of personalization and engagement with software systems (e.g. smart phones, social media) can boost users' interest to become part of small scale or large-scale design processes. It is through active and engaged participation that socio-technical solutions help lay the foundation for lifelong learning and design. “Do It Yourself” solutions ignite people’s natural desire to explore and discover. Starting from these considerations and the results of the previous workshops on “Cultures of Participation in the Digital Age”, the 4th CoPDA workshop at NordiCHI’16 explored theories, frameworks, systems, and experiences in order to understand and support what encourages users from wanting to participate rather than having to participate. We invited researchers and practitioners to discuss and exchange experiences with learning and working environments where people are encouraged to explore their unique talents and interests, and where designers are facilitators of the creative design process by providing the right context and tools for ordinary users and end-user developers. The focus on “wanting to participate” was aimed at enabling the design of products and services more effectively, while improving and developing user’s skills in problem solving, decision making, collaboration, and communication.

Author Keywords

Cultures of Participation; “Want to” participate; Self-

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directed learning; Modding; End-User Development; Meta-design; Collaborative Design; Co-creation; Maker Culture.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI):
Miscellaneous.

WORKSHOP AIMS AND SCOPE

The workshop addressed the theme “Game-Changing Design” of NordiCHI’16 by focusing on creating customized design solutions that aim to offer new opportunities for change by enabling users to become critical thinkers and the creators of the future [1][5]. Shifting the design focus toward solutions more oriented to human domain problems will enable designers to understand challenging subjects and offering solutions empowering users to develop critical thinking skills, grow their ideas, and make their own creations [11]. To achieve these objectives, the perception of what design means cannot consider only technological innovations but needs to rely on new ways of involving users as active contributors and facilitating the collaborative engagement of ordinary users in the voluntary, creative, communal, regular, non-commercial production of intellectual and cultural goods.

Cultures of participation need to be supported by the design of digital networked environments through traditional and innovative technical infrastructures. The existence of the Internet (specifically the Web 2.0 architecture) and novel solutions in the field of the Internet of Things (IoT) [4], service-oriented architectures (SOA) and other related technical infrastructures facilitate the conditions to support users' active contribution and collaboration without relying on external motivation, job requirements, curricula, etc. The main challenge for cultures of participation to succeed is that people must be intrinsically motivated to participate (e.g., being motivated by acquiring social capital and new skills rather than economic gains [14]). The workshop will explore socio-technical approaches able to empower users to ask the right questions [7], define specific problems, and

design their own solutions [6]. The desire of users to be the architects of their own products and services is based on the study of solutions that exploit and balance: sustainable HCI; novel interfaces; familiar technology in new contexts or novel technology in known contexts; socio-technical investigations; self-directed learning; and modding (highly modifiable games) [10].

The workshop explored the working hypothesis that active participation in the design and development of products, processes, policies, and cultures will provide users with significant experiences as they are achieving their goals. Through the investigation of new modalities, the workshop aimed at creating the foundations for game-changing design in human-computer interaction: how users' skills can be enhanced through active participation; how users can take charge of improving their work, learning and personal environments; and how empirical methods can help studying and identifying failures and successes (e.g. Wikipedia, open source software, Lego) [8, 12, 13].

WORKSHOP ORGANIZATION

The 4th International CoPDA workshop followed in the footsteps of the successful previous workshops: (1) "Empowering End Users to Improve their Quality of Life" (held in 2013 in conjunction with IS-EUD 2013 in Copenhagen, Denmark) [9]; (2) "Social Computing for Working, Learning, and Living" (held in 2014 in conjunction with AVI 2014 in Como, Italy) [3], and (3) "Coping with Information, Participation, and Collaboration Overload" (held in 2015 conjunction with IS-EUD 2015 in Madrid, Spain) [2].

The workshop was held on October 23rd 2016, in Gothenburg (Sweden) . We invited researchers and practitioners from various backgrounds and communities, to discuss the impact of the game-changing design on the wish to be an active participant in the design and development process of systems, products and services, and to investigate how methods, tools and frameworks can be leveraged to benefit research and practice in personalized socio-technical solutions.

Participants submitted 4-page position papers that were presented during a session without a rigid timetable and in a unique "table discussion" format: each participant could get hands-on experience with situations, success stories and failures in design projects based on the idea of fostering a "want to" participation culture, which were brought to the workshop by participants and organizers. These stories and experiences were used as a basis for discussions on how the different cultures can play in empowering users in more attractive ways and involving design processes. Participants then reflected on their experiences, to elicit discussion on their success or failure stories, and reflected on the factors that contributed to this. This discussion was held in sub-groups, each addressing some topics that the organizers selected on the basis of the submitted papers and the discussions of the morning session. Each group presented

their thoughts to a plenary closing. The overall aim of this discussion was to identify the grand challenges that cultures of participation should pursue in the next 5-10 years.

In summary, the workshop provided a forum to discuss, among others, the following research questions:

- How to design and create socio-technical environments in which people "want to" participate rather than "have to" participate?
- How to analyze failure stories where students/people felt they "had to" learn, work, and collaborate?
- How to create environments by a "low threshold-high ceiling" architecture?
- How to support human-work interaction (supported by computer) and not only human-computer interaction (so people can focus on their tasks and activities rather than on the use of computer systems)?
- How to find a better balance between "curriculum-driven learning" (often experienced as "have to") and "self-directed learning" (often done as "want to")?
- How to foster and focus on intrinsic motivation (rather than extrinsic forces)?
- How to support meta-design to give control to learners, workers, designers and citizens?
- How to encourage citizen science?
- How to support "modding" (highly modifiable games) that makes players become engaged in play and learning?

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