# **TwinTide Final Conference**

10-12 October 2013, Bari, Italy

## **Local Organizer:**

Prof. Maria Francesca Costabile, Dr. Carmelo Ardito University of Bari, Italy

#### **Program Committee:**

Dr. Effie Law, Univ. of Leicester, UK/ ETH Zürich, Switzerland Prof. Gilbert Cockton, Northumbria University, UK Prof. Chris Stary, University of Linz, Austria Dr. Matthias Neubauer, University of Linz, Austria Prof. Ebba Hvannberg, University of Iceland Dr. Arnold Vermeeren, TU Delft, the Netherlands Prof. Philippe Palanque, *Universite Paul Sabatier France* Dr. Marco Winckler, Universite Paul Sabatier, France Prof. Jan Gulliksen, KTH, Sweden

# Technical Program

Dr. Mark Springett, Middlesex University, UK

10th October 2013, Thursday

Time	Activities
14:00 -	Opening and Welcome
14:15	M. Francesca Costabile, University of Bari, Italy
14:15 -	Report on Management and Financial Matters
14:40	Effie Law, ETH Zürich, Switzerland/University of Leicester, UK
	Report on Dissemination Activities
	Jan Gulliksen, KTH, Sweden
	Reports on Four WGs Activities
	Moderator: Effie Law
14:40 -	WG1: Critical Reviews of Design and Evaluation Method Potential and
15:00	Value-Realisation in IT-enhanced Sectors
10.00	Gilbert Cockton, Northumbria University, UK
15:00 -	WC2. Transferability of Design & Evaluation Methods in IT onhanced
15:00 -	WG2: Transferability of Design & Evaluation Methods in IT-enhanced Sectors Chris Stary, University of Linz, Austria
15:20	
15:20 -	WG3: Interplay between Design and Evaluation, Quality Models and
15:40	Standards
	Ebba Hvannberg, University of Iceland
15:40 -	WG4: Framework for Diffusion of Design & Evaluation Method
16:00	Innovation
	Arnold Vermeeren, TU Delft, the Netherlands
16:00 -	
16:30	Coffee break
	Panel Discussions: Implications of the Results of the Four WGs
	Moderator: Jan Gulliksen
	Panel WG1: Gilbert Cockton
16:30-	Discussant: Gaelle Calvary (Grenoble Institute of Technology, France), Marcin Sikrosk
17:00	(Gdansk University, Poland), Jettie Hoonhout (Philips Research, the Netherlands)
17:00 -	Panel WG2: Chris Stary
17:30	Discussant: Patrizia Marti (University of Siena, Italy), Geraldine Fitzpatrick (TU
17.00	Wien, Austria), Stefan Cronholm (University of Borås, Sweden)
	Panel WG3: Ebba Hvannberg
17:30 -	Discussant: Kaisa Väänänen-Vainio-Mattila (Tampere University of Technology,
18:00	Finland), Michele Visciola (Experientia, Italy), Mark Springett (Middlesex University,
	UK)
10.00	Panel WG4: Arnold Vermeeren
18:00-	Discussant: Marc Steen (TNO, the Netherelands), Anne Kaikkonen (Cresense,
18:30	Finland), David Geerts (KU Leuven, Belgium)
20:00 -	
open	Dinner

#### 11th October 2013, Friday, Morning Session

	Invited Talks: Part I Moderator: Mark Springett
9:00 - 9:30	Gaelle Calvary, Grenoble Institute of Technology, France Design Methods, from Theory to Practice: Fasten Seat Belts! Context is Key!
9:30 - 10:00	<b>Geraldine Fitzpatrick,</b> <i>TU Wien, Austria</i> Reflecting on Methods as Negotiated Adaptive Practice
10:00 - 10:30	Kaisa Väänänen-Vainio-Mattila, Tampere University of Technology, Finland Evaluating the User Experience of Ubiquitous Systems
10:30 - 11:00	Marc Steen, TNO, the Netherlands Design for Wellbeing and the Capability Approach
11:00 - 11:30	Coffee Break
11:30 - 12:30	Panel Discussion: Research Agenda on HCI Methods for the Next Ten Years Moderator: Gilbert Cockton Discussant: Gaelle Calvary, Geraldine Fitzpatrick, Kaisa Väänänen-Vainio- Mattila, Marc Steen
12:30 - 13:30	Lunch

#### 11th October 2013, Friday, Afternoon Session

	Invited Talks: Part II Moderator: M. Francesca Costabile
13:30- 14:00	Patrizia Marti, University of Siena, Italy Research through Design: Case Studies in Public Sectors
14:00 - 14:30	Anne Kaikkonen, Cresense, Finland UX methods in industry- what influences the method selection in real life
14:30 - 15:00	<b>Michele Visciola</b> , <i>Experientia</i> , <i>Italy</i> Understanding people behaviors out of our labs; exploring real life to drive innovation
15:00 - 15:30	Jens Gerken, ICT Innovative Communication, Germany Field Experience: Usability engineers put to practice
15:30 - 16:00	Coffee break
16:00 - 17:00	Panel Discussion: Future Development of HCI Methods Work in Industry Moderator: Jens Gerken Discussant: Patrizia Marti, Michel Visciola, Anne Kaikkonen, Jettie Hoonhout
17:30 - Open	Guided tour in Bari and Dinner

#### 12th October 2013, Saturday

9:30-	Visionary Talk: Digital Champion of Sweden	
10:30	Jan Gulliksen, KTH, Sweden	
	What can HCI do to influence public policy on IT?	
10:30-	Debate on the Visionary Talk	
11:30	The TwinTide Debate Teams	
11:30 -	Closing Session	
12:00	Effie Law, M. Francesca Costabile	
12:00 -	Lunch	
14:00	Lunch	
15:00 -	Departure for Excursion	
20:00	Dinner	

# http://twintide.org/





**EU RTD Framework Programme: FP7** 



## **Gaelle Calvary**

Grenoble Institute of Technology France

**Title:** Design methods, from theory to practice: fasten seat belts! Context is key!



Abstract: Ten years ago, in Human Computer Interaction, plasticity was defined as the capacity of User Interfaces to adapt to the context of use while preserving user-centered properties. Easy to write, but so difficult to do! Indeed, as the contexts of use can not always be foreseen at design time, this means bridging the gap between design time and run time. As a result, the challenge is to develop a "meta" interactive system in charge of perceiving the context of use and redesigning the interactive system on the fly to preserve its worth for the end-user. The talk reviews the hints the approach is facing to in practice.

Biography: Gaelle Calvary is professor in computer science at the Grenoble Institute of Technology (Grenoble INP). She is deputy director of the Laboratory of Informatics of Grenoble, and in charge of the « Digital society » multidisciplinary innovation program of Grenoble INP. Before joining Grenoble, she has served as a User Interface (UI) software engineer for eight years at Thales. Her research area is about UI Plasticity, i.e. Uls capable of adapting to the context of use (user, platform, environment) while preserving user-centered properties. She explores model-driven engineering as well as artificial intelligence, and claims for models alive at runtime to support opportunistic user needs and unforeseen contexts of use. She has been involved in several European projects about UI plasticity (IST FP5 CAMELEON, ITEA EMODE, SIMILAR network of excellence, ITEA UsiXML). She is a member and the general secretary of the IFIP Working Group 2.7/13.4 about UI engineering ■

### Kaisa Väänänen-Vainio-Mattila

Tampere University of Technology, Finland

#### Title:

Evaluating the User Experience of Ubiquitous Systems



## Geraldine Fitzpatrick

TU Wien, Austria

**Title:** Reflecting on methods as negotiated adaptive practice



Abstract: As per the focus of TwinTide WG2, the application areas for which technology is being designed are becoming increasingly diverse in terms of contexts, users, valued qualities of experience, etc. This creates ongoing challenges for how we reinterpret and apply user-centred design and evaluation methods, and efforts to provide a more systematic and accountable approach are to be commended. I will contribute to this discussion by reflecting on some of our own experiences transferring methods into new contexts and how this relies on adaptive practices that are highly situated and negotiated. In particular I will reflect on experiences applying user research and design methods within a commercial context as part of a multi-disciplinary industry team. I will also share research experiences working in the health domain, which challenge our methods to deal with scale and broader socio-technical-organisational contexts; and experiences working with diverse user groups, including older people and disabled people, which challenge some of the implicit assumptions about participation that underlie many of our methods.

Biography: Geraldine Fitzpatrick is Professor of Technology Design and Assessment at Vienna University of Technology in Austria and leads the Institute for Design and Assessment of Technology, and Human Computer Interaction group. Prior to this, she was Director of the Interact Lab at the University of Sussex, and a Senior Research Fellow at the Distributed Systems Technology Centre and the Centre for Online Health in Australia. She also has industry experience, working in London as a User Experience consultant at Sapient. Her research is at the intersection of social and computer sciences with a focus on how to design pervasive, tangible and Web 2.0 technologies to fit in with everyday contexts of work, play and daily life. She uses mixed methods, with particular interest in qualitative methods. Application areas include supporting social interaction/ collaboration, health and well-being, and active engagement for older people.

**Abstract**: Ubiquitous systems are currently being designed and spread all around us. Some of them succeed, many of them fail. These systems are contextual, holistic, often involve several (even masses) of users and evolve dynamically over time. The aim of human-centered design is to evaluate systems early in their development life cycle. For ubiquitous systems early evaluation poses special challenges because "mock ups" of such systems do not enable users to experience the actual end-to-end interaction. This talk addresses the challenges of the ubiquitous systems design from the UX perspective, and discusses opportunities to involve aspects of UX evaluation even in the early phases of development.

Biography: Kaisa Väänänen-Vainio-Mattila is a full professor of usability and user experience in Tampere University of Technology (TUT), Finland, in the department of Pervasive Computing. In TUT, Kaisa is leading the unit of Human-Centered Technology which focuses on research of mobile and ubiquitous user experience. Kaisa has 20 years of experience in research related to human-computer interaction of novel systems, both in university and industry, including employment for over 10 years with Nokia Inc. Kaisa's research interests cover user experience and human-centered design in product development, with emphasis on design and evaluation of mobile and ubiquitous communication products and services. Kaisa has been frequently acting in programme committees of several international conferences, such as MobileHCI, MUM, Ubicomp, NordiCHI and CHI. ■



**Marc Steen**TNO, the Netherlands

**Title**: Design for Wellbeing' and the 'Capability Approach

**Abstract**: TwinTide is about human-centred design and evaluation methods ('means'). As a complement, I would like to talk about what we might want to, might be able to, might need to, realize in the 'real world' ('ends') (Victor Papanek). My intention is to put TwinTide in a broader context, and to focus on 'what is it for' (John Thackara). The field of design has moved from design for safety, to design for functionality, to design for usability, to design for experience, and is currently moving towards Design for Wellbeing (DfW) (cf. Positive Design, by Pieter Desmet). I would like to advocate taking a eudaimonic perspective on wellbeing, i.e., on promoting human flourishing ,drawing from Aristotle (cf. Martin Seligman, Positive Psychology). In addition, I would like to propose following the Capability Approach (CA) in organizing DfW projects. The CA (Amartya Sen; Martha Nussbaum; cf. Ilse Oosterlaken) can help to avoid two pitfalls: 1) too much focus on (fixated) technology, and 2) too much focus on (prescribing) behaviour. Ideally, the CA helps to organize projects which—both in their process and in their outcomes promote people's empowerment, enhance their freedom and development, so that they can draw from the available technologies, and choose to live their own versions of 'the good life.

Biography: Marc Steen works as a senior scientist at research and innovation organization TNO (www.tno.nl). He earned MSc, MTD and PhD degrees in Industrial Design Engineering at Delft University of Technology. Prior to TNO, he worked at Philips and KPN. His expertise is in humancentred design, co-design, open innovation and innovation management (www.marcsteen.nl). He is currently interested in the ways in which innovation projects can promote sustainability and wellbeing. ■



## Patrizia Marti

University of Siena, Italy & Technical University Eindhoven, the Netherlands

**Title**: Research through design: case studies in public sectors

**Abstract**: The Interaction Design community has defined an innovative approach called Researchthrough-design (Stolterman, 2008), that uses design as a mean and objective of research. Through Researchthrough-design, designers explore the problem at hand with developing experienceable prototypes in the real context of use, they reflect back on the design process and the achieved results, develop a set of research questions that guide the development of the next iteration of prototypes or projects. The iterative design cycles are conducted in a diachronic, retrospective way, by reflecting on how the previous iterations evolved in time and which new topics and challenges emerged from practice in the field. Donald Schön introduced the idea of design as a reflective practice where the act of reflecting-on-action enables designers to develop a useful repertoire of design ideas and concepts to be used in future projects (Schön, 1983). Bruce Archer (1995) defines Research-through-design as a "systematic enquiry conducted through the medium of practical action, calculated to generate or test new, or newly imported, information, ideas, forms or procedures and to generate communicable knowledge" (Archer, 2004, p.15).

This kind of research is knowledge-directed. It produces new knowledge through testing and concretely acting in the context of application. It is systematic and situation-specific, it is pursued through action in and on the real world, in all its complexity. In my talk, this approach will be discussed through the presentation of case studies in public sectors, in particular in the health care and cultural heritage domains. The cases will show the potential of the approach and the issues related to its application and transferability to the public sector.

#### References:

Archer, B. (1995) The nature of research. *Co-Design* 2, 6-13.

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**Biography:** Patrizia Marti is part time Professor at the Department of Industrial Design, Designing Quality in Interaction Group, Eindhoven Technical University. She is Senior Researcher at the Department of Social, Political and Cognitive Science, University of Siena where she teaches Interaction Design. She is Rector's Delegate for Technological Innovation in the Humanities at the University of Siena. In 2013, she received a honorary professorship at SeoGang University in Seul, Korea. Patrizia has an interdisciplinary background in philosophy and computing. She has a Ph.D. in Aesthetics of Interaction. She coordinates the HUMUS Network on cultural heritage and creative industry (<a href="www.humus.unisi.it">www.humus.unisi.it</a>). Her research interests range over a broad range of topics — including human-centred design, interaction design, aesthetics of interaction, learning and special education, design and validation of complex systems, and societal impacts of new technologies. She is cited across these fields. She has been a principal investigator on many EU funded projects. She has been expert advisor to many EU and international bodies, including EU Commission, EU Future & Emerging Technologies Programme, EU Intelligent Information Interfaces, Eurocontrol, EU Disappearing Computer, UX group at University of Warsaw (Poland), Swedish Agency for Innovation Systems. From 2004 until 2013 she promoted 9 PhD students. She was the keynote speaker and a member of the scientific committee for several international conferences. She has been also the editor for special issues of international journals. Her full CV including a list of publications is available at

# Anne Kaikkonen

Cresense, Finland

**Title:** UX methods in industrywhat influences the method selection in real life



Abstract: The selection criteria for user research and validation methods in context where usability and UX practitioners work, differs from the academic research methodology criteria. This persentation aims to give insights on what kind of questions practitioners both in industry and goverment systems try to answer when conducting UX research and validation and what are the issues influencing the method selection. When providing information on the boundaries of UX practitioners' work, this presentation tries to answer the question: why there are so few practitioners presenting papers in academic conferences.

Biography: Anne Kaikkonen works at service design agency, Cresense, as a senior user experience strategy consultant. She is an experienced human factors and user experience specialist with over 20 years of experience as a practitioner and a researcher. Prior to Cresense Anne worked in various positions at Nokia for 14 years and at Fujitsu computers and ICL personal systems for 4 years. Before joining industry, she worked for a brief period at the University of Helsinki. Anne has experience on running overall user centric design process and conducting the user experience activities at any phase of the product and service development, from idea generation to productization... Anne has background in psychology. Her doctoral thesis in Technical University of Helsinki (2009), was on evolution of Mobile Internet user experience. As the thesis work was done while working in product development, it combined technical, economical and user/ consumer perspectives. Anne is currently studying adult pedagogy at Open University of Jyväskylä, Finland.

## Jens Gerken

ICT Innovative Communication, Germany

**Title:** Field Experience: Usability engineers put to practice



# Michele Visciòla

Experientia, Italy

**Title:** Understanding people behaviors out of our labs; exploring real life to drive innovation.



Abstract: Cognition is distributed and embodied in our artifacts. From this perspective people behaviors can be considered as individual and collective interpretations of what those artifacts make possible. Real life exploration help to understand how people modify their life and behaviors while using those artifacts. People behaviors and culture evolve continuously. How to intercept possible directions of change? Which is the role of user-centred design to facilitate behavioral change and culture evolution? The modeling of behaviors is the design of new conditions or new possibilities for human behaviors to evolve according to new and desirable patterns. These new patterns also define possible evolutions of a given culture. Therefore by modeling the conditions for a behavioral change, we also create the conditions for an evolution of the culture. As a conclusion of my intervention, I will present shortly 3 projects where we designed new platforms to drive innovation focusing on behavioral, cognitive and social modeling.

Biography: Michele Visciòla is President and one of the founding partners of Experientia. Michele is an international expert on usability engineering, human computer interaction and user-centred innovation. He has specific interests in new interfaces, notification systems, scenario design and the usability-aesthetics relationship. Michele has participated in many national and international information system design projects, covering a wide range of expertise (from aeronautics to naval systems, and from internet to mobility systems). His long professional experience includes consultancy for companies such as Nokia Denmark, Research in Motion, Samsung, and Condé Nast. As a university professor, he taught digital culture for designers at the Industrial Design Department of the Milan Polytechnic and "Evolution of people-centred design methods" at the Bicocca University of Milan. He has written and co-authored books and several papers, and he edited the scenario analysis section of the Book of Vision of the Wireless World Research Forum. ■

**Abstract**: For years, one important goal for usability research was giving practitioners the right tools to be able to apply Usability Engineering / UX Design in practice. Now, more and more "career starters" enter the market that have a good education and training in Usability Engineering and thereby should have the right tools at hand. Similar, two years ago, I was hired as a Usability and User Experience specialist from the company ICT. My talk reflects on what that may really mean in practice by presenting my own experiences as well as those from several colleagues from "my generation".

Biography: Jens Gerken is the Prinicipal Consultant of ICT AG, focusing on concept and realization of interactive media installations in (semi-) public environments such as museums, corporate showrooms and trade shows for companies such as Audi, Daimler, or Siemens. From tabletop interfaces to large touch walls and gestural interaction, Jens' expertise is to find innovative, exciting, and usable solutions for visitors and customers alike. Since 2011 he holds a PhD in Information Science with focus on Human-Computer Interaction from the University of Konstanz, Germany. His research focused on empirical research methods for HCI, new forms of interactive information visualization, as well as multi-touch, gestural or tangible input modalities. In 2009 he joined Microsoft Research Cambridge for 6 months to work on tabletop interactions "Beneath the Surface". At ICT AG he helped to commercialize the research concepts from that time (ZOIL) into a successful product platform smartPerform for multi-touch and multi-display environments (www.smartperform.de). ■