## PREFACE

The Web is the biggest open public space for information, communication and knowledge sharing for billions on the planet. However, it is not (yet) accessible for over half of the world population, mostly in the Global South. This symposium addresses the ensuing issues, in other words, it tackles the Web dimension of what is commonly called the Digital Divide, and (even more importantly) what can be done about it.

Barriers to the Web and universal access to it include no Internet, poor infrastructures, scarce electricity, language and limited text literacy. Such obstacles are here to stay for many years to come. Thus, innovative solutions, cross-border and interdisciplinary thinking and a reflective debate are needed to realize the full potential of the Web.

The fifth annual symposium on Perspectives on ICT for Development aimed to address these challenges. This workshop, co-located with the 10th ACM Web Science Conference in Amsterdam, the Netherlands, was held on 27 May, 2018. Relating to the conference, the theme for this year's workshop was "The Web and the Digital Divide". We aim to facilitate a reflective debate that should include the people at the "other" side of the digital divide, whose voices are all too often ignored.

A call for papers was published, allowing for short and long papers. We received 8 submissions, which were peer-reviewed by an independent Program Committee. 7 papers were accepted for publication at the workshop.

Next to these papers, the workshop featured a keynote address by Chris Reij of the World Resources institute and an invited talk by Francis Dittoh from the University for Development studies in Ghana. Students from the ICT for Development course of the Vrije Universiteit Amsterdam presented their work on ICT4D applications during a poster session and their posters are also included in these proceedings.

## The workshop organizers

Anna Bon – Vrije Universiteit Amsterdam, The Netherlands Victor de Boer – Vrije Universiteit Amsterdam, The Netherlands Christophe Guéret – Accenture Labs, Dublin, Ireland Gayo Diallo – Université de Bordeaux, France Jaap Gordijn – Vrije Universiteit Amsterdam, The Netherlands

## **TABLE OF CONTENTS**

Program Committee Members	1
Abstract keynote address Chris Reij	2
Abstract invited talk Francis Dittoh	3
André Baart, Anna Bon, Victor de Boer, Wendelien Tuyp and Hans Akkermans Kasadaka: A Voice Service Development Platform to Bridge the Web's Digital Divide	4
Franz-Ferdinand Rothe. ICT for Development in a Post-2015 World: How to conceptualise ICT4D in the context of the Sustainable Development Goals	5
Allard Oelen, Chris J van Aart and Victor de Boer. Measuring surface water quality using a low-cost sensor kit within the context of rural Africa	6
Joost Dijkers, Sietse Overbeek and Sergio España. Improving ICT4D projects with Agile software development	7
Melchior Keijdener, Sietse Overbeek and Sergio Espana. Scalability factors in an ICT4D context: A literature review	8
Sanjay Podder, Shalabh Kumar Singh, Praveen Tanguturi, Pradeep Roy, Christophe Guéret and Neville Dubash. <i>Tech4Good: Collectively scaling up social transformation</i>	9
Aske Robenhagen, Marije Visscher, Victor de Boer, Julie Ferguson. Knowledge Management Practices for Development – Lessons from Post-Earthquake Nepal	10
ICT4D student posters	11

## **PROGRAM COMMITTEE MEMBERS**

Chris van Aart - 2CoolMonkeys BV, Utrecht, the Netherlands Cheah WaiShiang - UNIMAS University of Malaysia Sarawak, Malaysia Marlien Herselman - CSIR - Pretoria, South Africa Adele Botha - CSIR - Pretoria, South Africa Francis Dittoh - University for Development Studies UDS, Tamale, Ghana Stefan Schlobach - Vrije Universiteit Amsterdam, NL Katharina Kinder-Kurlanda - Koblenz University, Germany Nana Baah Gyan - Central University, Accra, Ghana Jan Fransen -- IHS Erasmus University, NL Maneesha Sudheer - Amrita University, India Victor de Boer - Vrije Universiteit Amsterdam Jaap Gordijn - Vrije Universiteit Amsterdam Anna Bon - Vrije Universiteit Amsterdam Christophe Guéret - Accenture, Dublin, Ireland Gayo Diallo - Université de Bordeaux, France Santiago Gaitan - IBM Benelux Ed Tan - University of Copenhagen, Denmark Marije Geldof - Institute for Social Studies, the Hague, NL Stéphane Boyera - SBC4D, Toulouse, France David Dalton - Gorta Self Help Africa, Ireland

Edward Mutafungwa, Aalto University, Finland