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ICT Unbounded, Social Impact of Bright ICT Adoption

Yogesh K. Dwivedi, Emmanuel Ayaburi, Richard Boateng, John Effah

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IFIP is the global non-profit federation of societies of ICT professionals that aims at achieving a worldwide professional and socially responsible development and application of information and communication technologies.

IFIP is a non-profit-making organization, run almost solely by 2500 volunteers. It operates through a number of technical committees and working groups, which organize events and publications. IFIP's events range from large international open conferences to working conferences and local seminars.

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The working conferences are structured differently. They are usually run by a working group and attendance is generally smaller and occasionally by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

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Yogesh Dwivedi · Emmanuel Ayaburi ·
Richard Boateng · John Effah (Eds.)

ICT Unbounded, Social Impact of Bright ICT Adoption

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Accra, Ghana, June 21–22, 2019
Proceedings

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Preface

The main goal of IFIP Working Group 8.6¹ is understanding the development, diffusion, adoption, and implementation of technology, systems, as well as the resulting information that is produced and how it is used. The 2019 IFIP Working Group 8.6 conference was held in Accra, Ghana, and was hosted by the University of Ghana. We are very grateful to the university and its members, especially the School of Business, for generously offering conference facilities at no charge.

The 2019 Conference of the IFIP WG8.6 focused on “Bright Information and Communication Technologies (ICT).” This proceedings volume examines people and organizational issues with the design, implementation, and use of Bright ICT in relation to the development of society. Bright ICT, a 2015 initiative of the Association of Information Systems introduced by Prof J. K. Lee, refers to the grand vision of a bright society enabled by ICT (Lee, 2015). The concept of Bright ICT entails the development of relevant technologies, business models, public policies, social norms, international agreements, metrics of measuring national progress, and preventing undesirable activities on the Internet. Bright ICT research involves taking a holistic view in the design of an ICT-enabled future society (Lee, 2015). The papers included in this volume present research and business models that offer opportunities to achieve the Bright ICT vision within the context of developing, transitioning, and emerging economies.

The adoption and diffusion of information technology (Dwivedi et al. 2017) have seen many dark sides such as the emergence of cyber criminals and the unethical use of ICT (Lee and Fedorowicz, 2018). This major twist from the good intention of adopting technology and Web-based services has affected developing and less developed economies. Organizations in these economies can benefit from the innovative use of ICT and the diffusion of mobile technologies within their customer base (Andoh-Baidoo, 2016). However, the less-developed economies generally lack the resources and capabilities needed to fight the negative effect of ICT (Dwivedi et al. 2015; Kamal et al. 2009). Research on ICT in the context of these economies that focuses on people and organizations is still scarce. The papers presented in the proceedings focus on proposing and testing theoretical models to address different ICT research problems.

The conference offered an opportunity for the presentation of research on the progress made in this endeavor and an opportunity to understand how the knowledge accumulated thus far translates into societal benefit. We particularly welcomed research that questioned how emerging technologies are adopted and appropriated in organizations and everyday life and the impact they are having. However, we also remained open and committed to the wider theme of the IFIP 8.6 working group. All papers were double-blind reviewed by at least two expert reviewers. We followed a constructive

¹ <http://ifipwg86.wikidot.com/>.

reviewing process. This resulted in 30 full-length papers and four short papers from a total of 72 papers submitted. In addition, 47 doctoral consortium projects were accepted to be presented at the pre-conference doctoral consortium and they do not appear in the proceedings. The acceptance rate of the papers in the proceedings is nearly 47%. We appreciate the members of the Program Committee for helping in the reviewing and selection process and providing their comments to us in a timely manner, thereby making this event possible.

This book is organized in five parts to reflect the themes of the papers. Part I includes papers that address technology adoption, diffusion, and ubiquitous computing in government and developing countries. Part II presents papers on big data and business intelligence implementation at the firm and country levels. Part III includes papers on smart cities involving different smart technologies ranging from analytics to smart home devices. Part IV presents papers that discuss security, privacy, ethics, and misinformation. The final part includes papers that examine different concepts in social media and open computing. The papers offer insightful contributions in the context of developing economies by providing recommendations that help mitigate the dark side of the Internet and realize the potential of existing and emerging technologies.

Our sincere thanks go to all the authors, reviewers, attendees, Program Committee members, program chairs, and the University of Ghana staff who all made the 2019 IFIP WG 8.6 conference a success. Special thanks to Prof. H. R. Rao and Prof. George Kasper for helping to bring this conference to Ghana.

April 2014

Yogesh Dwivedi
Emmanuel Ayaburi
Richard Boateng
John Effah

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