

Lecture Notes in Business Information Processing

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Preface

During the 21 years of the International Conference on Business Information Systems, the conference has grown to be a well-renowned event for the scientific and business communities. Every year the conference gathers international researchers for scientific discussions on modelling, development, implementation, and application of business information systems based on innovative ideas and computational intelligence methods. The 21st edition of the BIS conference was jointly organised by the Fraunhofer Institute for Open Communication Systems, Germany and Poznań University of Economics and Business, Department of Information Systems, Poland, and was held in Berlin, Germany.

Digital technologies transform the way how business is made, companies grow, links between people are created and evolve, and many others. Digital Transformation means that digital usages inherently enable new types of innovation and creativity. In general, Digital Transformation is described as “the total and overall societal effect of digitalization”. Digitalization resulted in the transformation of existing business models, socio-economic structures, legal and policy measures, organizational patterns, cultural barriers, etc. There are a number of reasons why businesses undergo Digital Transformation. The main argument is that they simply have to.

The BIS conference follows popular research trends, both in the academic and business domain. Thus, to continue this tradition, the theme of BIS 2018 was “Digital Transformation an imperative in today’s business markets” and the goal was to enable sharing theoretical and practical knowledge of the ongoing Digital Transformation activities and induce further innovations that would affect both individual businesses and whole domains, such as administration, communication, art, medicine, healthcare, finance, and science.

The first part of the BIS 2018 proceedings is dedicated to Big and Smart Data and Artificial Intelligence. This is followed by other research directions that were discussed during the conference, including Business and Enterprise Modelling, ICT Project Management, Process Management and Smart Infrastructures. Finally, the proceedings end with Social Media and Web-based Business Information Systems as well as Applications, Evaluations and Experiences of the newest research trends in various domains.

The Program Committee of BIS 2018 consisted of 77 members who carefully evaluated all the submitted papers. Based on their extensive reviews, 30 papers were selected.

We would like to thank everyone who helped to build an active community around the BIS conference. First of all, we want to express our appreciation to the reviewers for taking the time and effort to provide insightful comments. We wish to thank all the keynote speakers who delivered enlightening and interesting speeches. Last but not least, we would like to thank all the authors who submitted their papers as well as all the participants of BIS 2018.

Organization

BIS 2018 was organized by the Fraunhofer Institute for Open Communication Systems and Poznań University of Economics and Business, Department of Information Systems.

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