# **Lecture Notes** in Business Information Processing

300

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## Information Systems: Research, Development, Applications, Education

10th SIGSAND/PLAIS EuroSymposium 2017 Gdansk, Poland, September 22, 2017 Proceedings



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#### **Preface**

Systems analysis and design (SAND), or Business Informatics, as it is more frequently called in Europe, constitutes the classical field of research and education in the area of management information systems (MIS). SAND continuously attracts the attention of both academia and business. The rapid progress made in ICT naturally generates the requirements for the new generation of methods, techniques, and tools of SAND, adequate for modern IS challenges. Therefore, international thematic conferences and symposia have become widely accepted forums for the exchange of concepts, solutions, and experiences in SAND. In particular, the Association for Information Systems (AIS) is undertaking a number of initiatives towards SAND's international development.

The objective of the EuroSymposium on Systems Analysis and Design is to promote and develop high-quality research on all issues related to SAND. It provides a forum for SAND researchers and practitioners in Europe and beyond to interact, collaborate, and develop their field. The Eurosymposia were initiated by Prof. Keng Siau as the SIGSAND – Europe Initiative. Previous EuroSymposia were held at:

- University of Galway, Ireland 2006
- University of Gdansk, Poland 2007
- University of Marburg, Germany 2008
- University of Gdansk, Poland 2011
- University of Gdansk, Poland 2012
- University of Gdansk, Poland 2013
- University of Gdansk, Poland 2014
- University of Gdansk, Poland 2015
- University of Gdansk, Poland 2016

The accepted papers of the EuroSymposia held in Gdansk were published as follows:

- 2nd EuroSymposium 2007: A. Bajaj, S. Wrycza (eds), Systems Analysis and Design for Advanced Modeling Methods: Best Practises, Information Science Reference, IGI Global, Hershey, New York, 2009
- 4th EuroSymposium 2011: S. Wrycza (ed.) 2011, Research in Systems Analysis and Design: Models and Methods, series: LNBIP 93, Springer, Berlin 2011
- Joint Working Conferences EMMSAD/EuroSymposium 2012 held at CAiSE'12: I.
   Bider, T. Halpin, J. Krogstie, S. Nurcan, E. Proper, R. Schmidt, P. Soffer, S. Wrycza (eds.) 2012, Enterprise, Business-Process and Information Systems Modeling, series: LNBIP 113, Springer, Berlin 2012
- 6th SIGSAND/PLAIS EuroSymposium 2013: S. Wrycza (ed.), Information Systems: Development, Learning, Security, Series: Lecture Notes in Business Information Processing 161, Springer, Berlin 2013

- 7th SIGSAND/PLAIS EuroSymposium 2014: S. Wrycza (ed.), Information Systems: Education, Applications, Research, Series: Lecture Notes in Business Information Processing 193, Springer, Berlin 2014
- 8th SIGSAND/PLAIS EuroSymposium 2015: S. Wrycza (ed.), Information Systems: Development, Applications, Education, Series: Lecture Notes in Business Information Processing 232, Springer, Berlin 2015
- 9th SIGSAND/PLAIS EuroSymposium 2016: S. Wrycza (ed.), Information Systems: Development, Research, Applications, Education, Series: Lecture Notes in Business Information Processing 264, Springer, Berlin 2016

There are three organizers of the 10th EuroSymposium on Systems Analysis and Design:

- SIGSAND Special Interest Group on Systems Analysis and Design of AIS
- PLAIS Polish Chapter of AIS
- · Department of Business Informatics of University of Gdansk, Poland

SIGSAND is one of the most active SIGs with quite a substantial record of contributions for AIS. It provides services such as the annual American and European Symposia on SIGSAND, research and teaching tracks at major IS conferences, listserv, and special issues in journals.

The Polish Chapter of the Association for Information Systems (PLAIS) was established in 2006 as the joint initiative of Prof. Claudia Loebbecke, former President of AIS, and Prof. Stanislaw Wrycza, University of Gdansk, Poland. PLAIS co-organizes international and domestic IS conferences.

The department of Business Informatics of the University of Gdansk is conducting intensive teaching and research activities. Some of its academic manuals are bestsellers in Poland. The department is active internationally. The most significant conferences organized by the department were: the 10th European Conference on Information Systems, ECIS 2002, and the International Conference on Business Informatics Research, BIR 2008. The department is a partner of the ERCIS consortium – European Research Center for Information Systems.

EuroSymposium 2017 had an acceptance rate of 22%, with submissions divided into the following three groups:

- Data Analytics
- Web-Based Information Systems
- Information Systems Development

The accepted papers reflect the current trends in the field of systems analysis and design.

I would like to express my thanks to all authors, reviewers, advisory board members, and the members of the International Program Committee and Organizational Committee for their support, efforts, and time. They have made possible the successful accomplishment of EuroSymposium 2017. The 10th SIGSAND/PLAIS EuroSymposium is organized in conjunction with the Golden Jubilee (50 years) of Business Informatics at the University of Gdansk.

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- The Polish Chapter of the Association for Information Systems - PLAIS

- The Department of Business Informatics at the University of Gdansk

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## **EuroSymposium 2017 Topics**

Agile Methods
Big Data
Business Process Modeling
Cloud Computing
Conceptual Modeling
Cognitive Issues in SAND

#### X Organization

Crowdsourcing and Crowdfunding Models

Design of Mobile Applications

Design Theory

Case Studies in IS

Enterprise Architecture

Enterprise Social Networks

Ethical and Human Aspects of IS Development

Human-Computer Interaction

Information Systems Development: Methods and Techniques

Internet of Things

Model-Driven Architecture

Ontological Foundations of SAND

Open Source Software (OSS) Solutions

Project Management

Requirements Engineering

Research Methodologies in IS

SAND in ERP and CRM Systems

SCRUM Approach

Smart Information Systems

Social Media Analytics

Social Media Use in Business

Social Networking Services

Software Intensive Systems and Services

Teaching SAND

Teams and Teamwork in IS

Towards Data Driven Information Systems

User Experience (UX) Design

UML, SysML, BPMN

Workflow Management

## **Contents**

Data	<b>Analytics</b>
------	------------------

Data Cleaning Technique for Security Logs Based on Fellegi-Sunter Theory	3
Understanding Benefits and Limitations of Unstructured Data Collection for Repurposing Organizational Data	13
Analysis of Benefits for Knowledge Workers Expected from Knowledge-Graph-Based Information Systems	25
Web-Based Information Systems	
Comparative Analysis of e-Banking Services in Poland in 2016 Witold Chmielarz and Marek Zborowski	43
Integration of Eye-Tracking Based Studies into e-Commerce Websites Evaluation Process with eQual and TOPSIS Methods	
Model Supporting Social Media Hiring	81
Information Systems Development	
Essential Challenges in Business Systems Modeling	99
Contextual Factors of Architectural Strategy for Complex Systems	111
Investigating Enterprise System Adoption Failure Factors from an Employee Age Perspective	

## XII Contents

A Proposal for an ECM Systems Modeling Method – Defining Tactical	
Perspectives - Lesson Learnt from a Case Study	
Jan Trąbka	
Author Index	153