

CAiSE '17

29th International Conference on Advanced Information Systems Engineering
12-16 June 2017, Essen, Germany

CALL FOR PAPERS CAiSE '17

Digital Connected World – Informed, Disruptive Business Transformation

Public and private organizations are entering in the digital world where real time data is available about their operations, their operating environments, third-party services offered to increase their performance as well as chances in the demands of their customers. This data abundance offers new opportunities but also raises new challenges for **information systems**. The systems have to exploit these data to help (networked-) organizations to decide and conduct appropriate business transformations necessary to guarantee their survival in a continuously changing world.

The digitalization of the world, the availability of the data in real-time and the increasing connections of things, IT-systems and organizations significantly increase the role of information systems in the organizations during the last decades. Historically, enabled by databases and file systems technologies supporting data storage and retrieval facilities, information systems have been proven instrumental in supporting management issues associated with the optimization and partial automation of processes and document flows in more efficient organizations.

With the internet and web technologies, together with an increased quality of the information, information systems have started to progressively be considered as a centre of profit, rather than as a centre of costs. The transformation of data into information intensive services creating new customer/client value has led organizations to reshape their business value proposition. Architecture of information systems has evolved to enable increasingly interconnected **service systems**.

Today, technologies (like IoT and natural interfaces) are becoming more and more pervasive allowing to sense and always more data on all the facets of an organization and of its environment. The collection of data is no longer limited to its processes and information flows. Data is available about almost any relevant aspect of the organization. With the support of new computational and cognitive technologies for managing this abundance of data, the key challenge is to evolve information systems into **smart systems**. These systems have to be sufficiently agile to rapidly analyse, predict and manage the needed disruptive and incremental business transformations of operations. From a centre of profit, information systems are now becoming the centre for sustainability of the organizations.

Awards and CAiSE '17 Special Issue

CAiSE '17 will feature a best paper award, a special issue, and a PhD-thesis award:

- **CAiSE '17 Best Paper Award:** CAiSE '17 will award the best paper (prize 1 000 € - sponsored by Springer Verlag).
- **Special Issue of CAiSE '17 in the "Information Systems Journal":** Authors of the selected papers of CAiSE '17 will be invited to submit an extended version of their paper to the CAiSE '17 special issue of the "Information Systems Journal".
- **CAiSE PhD Award:** CAiSE '17 will award the best PhD thesis of a past CAiSE Doctoral Consortium author (co-sponsored by the CAiSE Steering Committee and Springer). Additional information will be provided soon for this award. You may find the testimony of the 2016 CAiSE PhD Award winner at <https://www.youtube.com/watch?v=q-vv1H661C4>

Submission Conditions

Papers should be submitted in PDF format. The results described must be unpublished and must not be under review elsewhere. Submissions must conform to Springer's LNCS format and should not exceed 15 pages, including all text, figures, references and appendices. Submissions not conforming to the LNCS format, exceeding 15 pages, or being obviously out of the scope of the conference, will be rejected without review. Information about the Springer LNCS format can be found at <http://www.springer.com/comp/lncs/authors.html>. Three to five keywords characterizing the paper should be indicated at the end of the abstract. The type of paper (technical/empirical evaluation/experience/exploratory paper) should be indicated in the submission.

Each paper will be reviewed by at least two program committee members and, if positively evaluated, by one additional board committee member. The selected papers will be discussed among the paper reviewers on-line and additionally during the program board meeting in Luxembourg. Accepted papers will be presented at CAiSE '17 and published in the conference proceedings (**Springer Lecture Notes in Computer Science (LNCS)**).

Submission Deadlines

Main Conference

Abstract Submission 28.11.2016
Paper Submission 04.12.2016 (strict!)

Workshop Proposals 20.10.2016
CAiSE Forum 20.03.2017
Doctoral Consortium 20.03.2017

Types of contributions

We invite **four** types of original and scientific papers:

- **Formal and/or technical papers** describe original solutions (theoretical, methodological or conceptual) in the field of IS engineering. A technical paper should clearly describe the situation or problem tackled, the relevant state of the art, the position or solution suggested and the potential – or, even better, the evaluated – benefits of the contribution.
- **Empirical evaluation papers** evaluate existing problem situations or validate proposed solutions with scientific means, i.e. by empirical studies, experiments, case studies, simulations, formal analyses, mathematical proofs, etc. Scientific reflection on problems and practices in industry also falls into this category. The topic of the evaluation presented in the paper as well as its causal or logical properties must be clearly stated. The research method must be sound and appropriate.
- **Experience papers** present problems or challenges encountered in practice, relate success and failure stories, or report on industrial practice. The focus is on ‘what’ and on lessons learned, not on an in-depth analysis of ‘why’. The practice must be clearly described and its context must be given. Readers should be able to draw conclusions for their own practice.
- **Exploratory papers** can describe completely new research positions or approaches, in order to face a generic situation arising because of new ICT tools, new kinds of activities or new IS challenges. They must describe precisely the situation and demonstrate why current methods, tools, ways of reasoning, or meta-models are inadequate. They must also rigorously present their approach and demonstrate its pertinence and correctness to addressing the identified situation.

For all the submissions and depending on their type, we invite the authors to be explicit about the research method used.

Submission Topics

Contributions are welcome in terms of models, methods, techniques, architecture and technologies. Each contribution should explicitly address the engineering or the operation of information systems. Each contribution should clearly identify the information systems problem addressed as well as the expected positive impact of the contribution to information system engineering or operation. We strongly advised to authors to clearly emphasize those aspects in their paper, including the abstract.

Contributions about methods, models, techniques, architectures and platforms for supporting the engineering and evolution of information systems and organizations in the digital connected world could include (but are not limited to):

- Adaptive Management
- Cloud Technology for Transformation
- Compliance and Governance
- Context Awareness
- Creativity and Innovation
- Cyber (Socio) Physical Systems
- Data and Business Analytics
- Domain Specialization
- Industry 4.0
- Internet of Things, Services and Data
- Monitoring of System Execution Context and Customer Needs
- Organizational Learning
- Planning and Monitoring Adaptations
- Service Orientation and Encapsulation
- Sustainability

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