

Call for papers for

a

Special Issue of

Systèmes d'Information et Management

on

Cloud Business Modelling, Decision Making and Organisational Design

Guest Editors:

- **Ahmed Bounfour**, Professor of information systems and business modelling, RITM, University Paris Sud , ahmed.bounfour@u-psud.fr
- **Valérie Fernandez**, Professor of information systems and IT Strategic Management, Télécom ParisTech, CNRS LTCI
- **Emmanuel Waller**, Associate Professor of Informatics, University Paris Sud, Laboratoire de recherche en informatique (UPsud/CNRS)

Context and relevance

A large proportion of the academic literature on Cloud computing (CC) is related to the technical perspective and to a lesser extent to security perspective. Yet we are observing the development of researches on other dimensions such as business (Marston et al. 2011) or organisational that look at Cloud Computing from a service perspective. At the European level, several projects are now also looking at how Cloud Technologies and Solutions are situated in the enterprises and in the society (Petcu & Vázquez-Poletti , 2012). CC is now considered from different angles: 1) how it is used; 2) how it can be approached from the social trends of consumerisation of IT; 3) what are the impacts on organisations and ecosystems; 4) how it can be approached from the general business models (Stieninger & Nedhal, 2014, Venters & Whitley, 2012). In a recent European Conference on Information Systems edition (ECIS 2013), a significant number of papers covering different non-technical aspects of CC have been presented. Other literature papers developed specific dimensions of CC: simulating business models (Weinhardt et al.2009), cost effectiveness of commercial computing clouds (Brumec & Vrcek, 2013), ranking of cloud computing services (Garg, Versteeg & Buyya, 2013), outsourcing (Motohari-Nezhad, Stephenson & Singhal, 2009).

More generally, we might advance that the advent of CC might represent the next step in the virtualisation and “servicisation” trends in Information Systems, contributing to making organisations even more agile, by offering them the possibility to run “anything as a service” (XaaS) in IT. With CC, IT (infrastructure and services) gains an additional level of flexibility, allowing for instance an organisation to manage and operate its IT as a utility. More specifically, and according to some of the vendors arguments, CC solutions can allow an organisation to scale up quasi transparently its operations (even for short duration if necessary), paying mostly only for the usage (transforming its fixed costs into variable costs), and (out)sourcing its IT in the way it find the more convenient (e.g. selecting and changing external providers). Yet at the same time, this setting confronts organisations with a variety of new issues encompassing many dimensions (technical, legal, security, economical, organisational or societal) that they have to address in a holistic manner. For instance the (absence of) localisation of data can bring legal and security issues, and the transformation of the IT structure will have some important consequences from a business perspective (e.g. with transforming costs from fixed to variable, subcontracting, IT governance or from an organizational perspective (e.g. conducting to transform the IT function and demands of IT services of marketing and other departments).

In this context, we need to better evaluate the organisational stakes related to CC. We can question the level of readiness of IT departments, and more generally of the corporate general management, to deal with these new approaches to IT resources. Organisations might have some difficulties in evaluating and comparing the different options available to them. CC as a managerial practice on the one hand and as a bundle of heterogeneous services , on the other hand , needs to be better documented. This is by approaching it from the organisational design perspective. But this also implies at the same time an in-depth understanding of the underlying fundamental technical issues in CC, among which data management. In particular understanding how the technical organisation of the different levels of the cloud impacts the different users and organisations in terms of costs, scalability, security, based on fundamental technical approaches and tools, is needed.

There is then a need to develop an overall approach to CC from a business and **organizational design perspectives (including technological perspectives)**. Such a perspective will allow to develop a more holistic and more interactive and actionable (not only available via theories, but with “executable” models) views.

Aims of the special issue

The aim of this special issue is to bring together original research papers focusing on different facets of cloud computing: technical, managerial and economics. The special issue is expected to contribute to the state of the art on cloud computing, taking a special angle: the business and organisational design (and underlying technical issues). The issue will build on a special workshop to be held in November 2014, on cloud business organisational design (and underlying technical issues). The special issue is however open to contributions for those of the prospective authors interested but not able to make this event.

Subject Coverage

Suitable topics include, but are not limited to, the following:

- The theoretical foundations for cloud computing
- Cloud computing and (as) business modelling
- Cloud computing and IT ecosystems
- The evaluation of relevant practices in cloud computing
- The criteria for decision making in cloud computing contracts
- The economic (pricing, cost, value) of cloud computing contracts
- The organisational configurations in Cloud computing
- Big data, data management and cloud computing
- Foundations of price conscious data management in the Cloud
- Foundations of data pricing in the Cloud
- The adoption barriers and practices
- Cloud computing and organisational design – foresight approaches

Notes to authors

Submitted papers should not have been previously published nor be currently considered for publication in a journal.

All papers are refereed through a peer review process.

Key dates

30 October 2014: Submitting proposals

31 January: Response by the Editors

28 February 2015: Final version due

The special issue is due for publication on June 2015

Contact for the special issue

For any enquiries about the special issue, including subject coverage, please feel free to contact Prof. Ahmed Bounfour (ahmed.bounfour@u-psud.fr).

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