



## **Call for Papers: Cloud Computing and Electronic Commerce**

*Special issue of the Journal of Theoretical and Applied Electronic Commerce Research*

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The *Journal of Theoretical and Applied Electronic Commerce Research* is planning a special issue on the Cloud Computing and Electronic Commerce.

Cloud Computing has been introduced to address the access to services such as infrastructure, platform, and software among others, without having to own these resources. Cloud Computing refers to cloud technology and cloud service. Cloud technology derives from existing distributed and grid computing technologies while Cloud service refers to providing services such as software, infrastructure, and platform to remote customers.

Running operational systems via Cloud Computing promise benefits such reduction of costs of information technology, and of the required infrastructure to support the business operation. Cloud computing is becoming a reality and more important to all size organizations. This has helped large organizations to reduce the burden imposed by traditional information technology solutions and small and medium organizations to provide prospective and tailored approaches. SMEs are usually not capable to afford large and expensive solutions and benefit from scalable solutions.

Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS) are providing companies with alternative ways in which providing and developing information technology solutions. The question is how this affects electronic commerce activities? It might be assumed that starting electronic commerce activities becomes much easier for start-up companies and companies that still have not entered the digital world to provide products and services online, due to low start-up costs, and scalability.

Little is known about how network access to computing, online storage, software, processing, interdependency of access device, web browser access, pay per use, and scalability capacity is going to affect electronic commerce applications? Do changes in cloud architecture have an impact? What are trade-offs with regard to deployment models such as public, private, hybrid or community clouds, seen from the perspective of electronic commerce?

Which infrastructure and cloud software services, related to storage, computing capacity, and service management, file storage, appliances, and cloud management impact electronic commerce? Which generic platform services are relevant to electronic commerce cloud computing for instance with regard to business intelligence and integrations of applications? And finally what SaaS solutions, such as billing, financial services, legal, sales, content management, CRM or social networks are attractive to be integrated in electronic commerce? What are the legal and practical constraints? What is the vulnerability of cloud computer systems in relation to electronic commerce activities?

Research on the combination of cloud computing and electronic commerce is still scarce; therefore we want to dedicate this special issue to this topic. The purpose is to identify and publish innovative and original research in the field of Cloud Computing, with special focus on e-Commerce/e-Business. We are seeking original manuscripts that may be state-of-the-art survey papers on cloud computing and e-Commerce, reviews on emergent topics, comparison

and analysis reports, case studies, experimental reports, or industry reports on experience and lessons.

## **Subject Coverage**

Particular topics to be addressed in this issue might include, but are not limited to the following:

1. Cloud and Business models
  - Business models related to Cloud Computing and the Cloud Service
  - Cloud Computing and e-Commerce, e-Business, e-Markets, etc.
  - Cloud Computing and Cloud Service for Value Chain Management
  - Deployment models (community/private/public/hybrid)
  - Adoption Issues for Cloud Computing and Cloud Service
  - Services-Centric Business Models
  - Impacts on Business Process Management and Business Functions. For example, Human Resources, Finance, Marketing, Insurance, Logistics, etc.
  - Mobile cloud computing models, infrastructures, and approaches.
  - Mobility modeling, management and measurement techniques
  - Mobile-aware cloud databases and data retrievals
  
2. Security and Privacy issues
  - Privacy and integrity for cloud computing services
  - Access Control for cloud computing services
  - Security modeling for cloud computing and services
  - Secure cloud computing resource virtualization
  - Modeling cloud-centric threat models
  - Standards of security and privacy for Cloud application
  
3. Measurements and assessment of cloud security Services and Applications
  - Cloud services and applications (SaaS, PaaS, and IaaS)
  - Mobile Cloud Services and Applications (MSaaS, MDaaS, MPaaS, MIaaS, MNaaS, MTaaS)
  - Tools and techniques for developing and managing applications in cloud
  - Virtualization of Resources, Outsourcing, and Cloud Service
  - Application of cloud in private and public sectors/ case studies
  - Marketing and Customer Relationships on Cloud Service
  - Cloud Service in Government, Education, Finance and Banking, Manufacturing, Tourism, etc.
  - Empirical Cases on the Public, Private, Community, and Hybrid Clouds.

- Small, Medium, and Large Cloud Applications
- Integrating enterprise applications with the cloud
- Future Applications
- Quality of Service in Clouds and Applications
- Mobile context-aware services and computing for clouds
- Cloud-based mobile commerce applications and systems
- Location-aware mobile applications on clouds
- Innovative mobile applications enabled by the cloud
- Collaboration, management, and mobile cloud administration
- Debugging and performance analysis of cloud applications

#### 4. Technology Issues

- Cloud Computing Architecture
- Distributed and Cloud Networking
- Improving elasticity and availability in cloud infrastructure and cloud services
- Cost models and economics
- Monitoring systems, troubleshooting, and failure recovery
- Cloud management and configuration
- Virtual appliance management and composition
- Storage architectures
- Novel networking approaches
- Programming models
- Infrastructure Technologies
- Provisioning and Metering
- Resource Management and Performance
- Embedded mobile platforms and technologies for mobile clouds
- Mobile cloud data center and storage technology
- Emergent barcode/RFID/NFC-based mobile technologies
- Innovative mobile platforms and client technologies
- Novel mobile-ware database technologies
- Energy-saving wireless communication technologies
- Mobile-aware networking, protocols, and infrastructures
- Urban sensing and crowd-sensing, and smart sensor networks
- Mobile cloud design and administration
- Mobile connectivity and mobile cloud protocols
- Green computing in networking and mobile computing and clouds

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere.

Author guidelines can be found at [http://www.jtaer.com/author\\_guidelines.doc](http://www.jtaer.com/author_guidelines.doc). All submissions will be refereed by at least three reviewers. Authors should submit manuscripts into the JTAER system (<http://www.jtaer.com/admin/>)

For more information, please visit the following web site: <http://www.jtaer.com>.

### **Important dates**

- Initial full paper submission: 1 April 2013
- Notification of acceptance: 1 June 2013
- Submissions in revised form: 1 July 2013
- Final acceptance notification: 15 July 2013
- Camera ready version of paper: 15 August 2013
- Publication: December 2013

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