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* **Special Issue of the *Journal of Management Information Systems*** *
Transformative Value of Cloud Computing

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MOTIVATION

Cloud computing, referring to information technologies enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services), is fundamentally changing the way we collaborate, co-create and do business. As a transformative technology, cloud services affect every aspect of our lives, be it working, shopping, or watching movies. Cloud computing continues to experience rapid growth, with Forrester predicting the cloud market to hit US\$240 billion by 2020. As a major paradigm shift, cloud services will continue to revolutionize the ways we store, process, and use information, creating a wealth of possibilities for individuals, teams, organizations, and societies.

Although researchers' and practitioners' interest in cloud computing has continued undiminished, the focus has been primarily on either adoption or operational issues, such as migrating from on-premise to on-demand, minimizing fixed IT costs, or exploiting the IT resource flexibility offered by the cloud. It is time to take stock that there has been far less attention dedicated to the transformative and value-creating capacity of cloud computing. As a disruptive technology, it can enable truly innovative services and business models that engage consumers, employees, and citizens in unprecedented ways. In fact, it can disrupt entire industries sending them into a downward spiral while providing groundbreaking opportunities for others. In developing countries, cloud computing can enable communities to leapfrog into the next generation of IT and in doing so move them to economic competitiveness. Despite this potential as a game changer, the interplay between the cloud's inherent capabilities and its transformative value is not well understood and demands further research.

FOCUS

Rather than looking into the operational and tactical merits of the cloud, this special issue provides a special forum for IS and other scholars to engage in an important dialogue on strategic and transformative impacts of cloud computing. In particular, we see the strategic and transformative value of the cloud at five levels:

I. The cloud's transformative value for users and consumers:

The cloud enables users and consumers (simply 'users' hereafter) to integrate, combine, and leverage various services in novel ways that increase personal productivity and creativity. Evernote and DropBox are but two examples of highly extensible and "mashable" cloud services that have tremendous impact on how users organize and improve their work. While we have considerable knowledge on how stand-alone and self-contained information technology can influence individual task performance and creativity, our understanding is still limited regarding how specific characteristics of the cloud (e.g., on-demand self-service, extensibility, elasticity) can fundamentally and distinctively shape how users work and collaborate to increase performance and (co-)create value.

II. The cloud's transformative value for user organizations:

The cloud changes how organizations derive value from interacting with customers, suppliers, as well as internally, where it can provide economic advantages and enable new business capabilities and

models. Beyond being a mere IT sourcing model alternative, employing cloud computing in user organizations gives rise to the question how the cloud affects the role, strategy, governance, and capabilities of internal or external IT functions over time. And more broadly, how does the cloud contribute to transforming entire business models?

III. The cloud's transformative value for IT providers and the software industry:

The cloud 'natives' currently challenge the position of the incumbents and turn classic hardware and software delivery models upside down. While some software providers build up cloud capabilities in parallel to their on-premise business (e.g., SAP), others transform into fully-fledged cloud service providers (e.g., Adobe). Despite these realities, we know little about how existing and new cloud providers can develop cloud-based delivery capabilities, create flourishing ecosystems, and build (more or less open) value networks to integrate with upstream and downstream partners along future cloud IT supply chains.

IV. The cloud's transformative value for industries:

Cloud is a major catalyst changing the dynamics of various industries. Media (e.g., Netflix) and hospitality (e.g., AirBnB) are examples of industries that have already been disrupted and others (e.g., mobility, telecommunications, and financial services) are expected to follow. Highly regulated sectors (e.g., government, healthcare) may benefit from the cloud to circumvent or abandon unproductive legacy systems from the old on-premises era and develop shared platforms and community clouds that have great potential to create public value.

V. The cloud's transformative value for societies and developing countries:

The impact of cloud computing as a new IT delivery model can allow non-profit organizations to "leapfrog" IT infrastructures and gain access to IT services they could normally not afford. Similarly, organizations in developing countries can leverage cheap and flexible cloud computing capabilities in the absence of secure, reliable and well-developed IT infrastructures. Such democratization of access to computing and storage power can significantly improve the innovation potential and productivity of non-profit organizations and businesses in developing countries, resulting in an increased value for societies and economies overall.

The focus of this special issue is to stimulate innovative investigation of the transformative value of cloud computing (including Software-/Platform-/Infrastructure-as-a-Service) at or between all levels of analysis. All lenses of inquiry into the disruptive nature and impact of cloud computing are encouraged, including strategic, organizational, behavioral, economic, and technical perspectives. We welcome theoretical, analytical, and empirical (including primary data from cloud platforms, surveys, experiments, simulations, and case studies and secondary data from organizational, market and regulatory sources) contributions to the special issue.

TOPICS

All topics related to cloud computing and its transformative value are welcome. Possible research areas include, but are not limited to:

- Cloud computing services and innovative consumer behavior
- Cloud computing as a source and enabler for co-creation of products and services
- Cloud computing and big data analytics (e.g., online consumer journeys)
- Multi-level influences of cloud computing environments on team work
- Cloud-based business model evolution at cloud user organizations
- Cloud computing and its transformative impact on internal IT functions and services
- The cloud's business model implications for cloud providers and the software industry
- Strategies for building and growing cloud-based software ecosystems for IT providers
- The transformative role of cloud computing in developing countries
- Cloud computing and the digital divide

- Innovative cloud computing services in highly regulated industries (e.g., healthcare, government or financial services)
- Macro-/industry-level implications of cloud computing (e.g., how cloud computing is disrupting entire industries)
- The transformative role of cloud computing in education, cities, or e-government
- Cloud computing and openness (e.g., open innovation, open platforms or open society)
- Critical boundary conditions of the transformative use of cloud computing (such as privacy and security challenges)

Consistent with the policies of *JMIS*, the papers should aim to make a significant novel contribution to the field.

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IMPORTANT DATES

Researchers interested in submitting papers are invited to submit their **paper ideas / extended abstracts** to the Special Issue Guest Editors by **July 1, 2016**, for early reactions.

Full paper submission due:	October 1, 2016
First round of reviews completed:	February 1, 2017
Paper revisions due:	May 1, 2017
Second round of reviews completed:	August 1, 2017
Final decisions on acceptance:	November 1, 2017

Email your submissions to: benlian@ise.tu-darmstadt.de

For the format of the papers, please follow the guidelines on the *JMIS* website.

Any further queries should be directed to the Special Issue Guest Editors.