Journal of Universal Computer Science, vol. 16, no. 13 (2010), 1666-1667
submitted: 14/6/10, accepted: 28/6/10, appeared: 1/7/10 © J.UCS

Recent Trends in Service Science

J.UCS Special Issue

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Since Service Science, Management, and Engineering (SSME) was firstly coined by IBM, the "Service" has been one of the most important and common concepts in many research areas [Spohrer et al. 2007]. This Service Science is an interdisciplinary approach to the study, design, and implementation of services systems in which specific arrangements of people and technologies take actions that provide value for others [Jung 2009]. For example, in semantic web communities, a number of intelligent approaches have been investigated for better service [Jung 2008].

Thus, this special issue is composed of two parts; *i*) engineering and technical studies, and *ii*) managerial studies. While the first part is focusing on the technological issues, e.g., how to generate and discover the services [Jung 2010], the second part attacks the challenges from business and management, e.g., how to use the services.

The first technology-oriented part consists of 4 papers. The first paper in this issue, authored by Olha Danylevych, Dimka Karastoyanova, and Frank Leymann, proposes a new method to build service networks by combining SOA and BPM technologies. This paper envisions service networks modelling as the means to gain better alignment between the business and IT perspectives in enterprises.

As another important issue in Web services, the second paper authored by Carlos Pedrinaci and John Domingue introduces "Linked services". They have analyzed the main reasons why the existing Web services can not be realized in many applications yet. Based on these reasons, they envisage a new trend of the linked services (e.g., main principles, core technologies, and practical tools).

In the third paper, Lei Li, Yan Wang, and Ee-Peng Lim present a novel service selection method by taking into account trust. Particular, they are emphasizing that trust-based method is more important for selecting composite services.

The fourth paper by Jason J. Jung claims that the services should be ubiquitous and sustainable. Especially, the context-aware services for each user is important for understanding not only the context in a certain moment, but also temporal dynamics of the context over time.

The second part for management science is organized with three papers. The first paper, authored by Kichan Nam and Namhee Lee, proposes a conceptual framework in terms of service innovation. Especially, they are interested in a service-dominant logic (S-D logic) perspective that can provides an important theoretical insights that unifies the conventional literatures on service innovation.

In the second paper, Heiko Thimm and Karsten Boye Rasmussen claims that intermediation tasks in companies are important as a service. Such tasks are targeted for the configuration of the Virtual Enterprise, i.e. the search and selection from the available products, services, and competences found among the network participants.

The third paper by Chulmo Koo and Yulia Wati is an empirical study of mediating role of trust in mobile banking services. They claim that the trust mediated the effects of information quality to perceived usefulness and end-user satisfaction for banking services.

This special issue has been achieved by a number of fruitful collaborations. We would like to thank the editor in chief of Journal of Universal Computer Science (JUCS), Hermann Maurer, for his kind support and help during the entire process of publication. The special issue has selected 7 high-quality papers out of 18 submissions. This was possible thanks to the work of the renowned researchers that provided their anonymous reviews.

Finally, we are most grateful to the authors for their valuable contributions and for their willingness and efforts to improve their papers in accordance with the reviewers suggestions and comments.

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(Gyeongsan, Korea, June, 2010)

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