This special issue of the IJVCSN is devoted to computational technologies boosting the creation of Internet-based social networks and communities. In recent years we experienced the rapid development in the area of advanced groupware and social software frameworks. It became obvious that the impact the dynamic changes in virtual communities have on performance, service quality and functional properties of information systems cannot be neglected. The structure and internal organization of virtual communities determines the resource consumption patterns, their temporal changes, suggests predictions about the future behavior. Cooperation between community members appears to be a key factor in various knowledge management and problem-solving tasks.

In this issue we focus on dynamic processes which underline wide spectrum of phenomena emerging in virtual networks—from knowledge and resource management issues, formation of trust networks to practical applications in real-life business scenarios.

Thereby, we collected six interesting papers discussing the above issues and attacking different, formal and practical, challenges met in virtual communities of different size and origin.

The first article, *Measuring Similarity of Interests for Clustering Taggers and Resources* by Dichev, Jinsheng, Dicheva and Zhang presents the solution of user similarity problem utilized within a collaborative tagging system. Such systems support self-organization and formation of user communities basing on shared interests and group approach to resource tagging.

In the following work, *Social Support for Ontological Mediation and Data Integration*, Correndo, Alani and Salvadores present an community-based approach to ontology management in organizations enabled by OntoMediate, specialized software tool.

Groza, Handschuh, Breslin and Decker propose a support for interactive argumentative discussion (*An Abstract Framework for Modeling Argumentation in Virtual Communities*) in virtual community offering clear distinction between domain knowledge, the actual argumentation and the environment in which the argumentation is captured.

The fourth article, *Trust modeling in a Virtual Organization using Social Network Metrics* by Kolačzek, discusses the problem of trust modelling and integrates the notion of trust with classic parameters characterizing social networks adapting proposed trust metric to the use within virtual communities.
From the other hand, Kazienko, Ruta and Brodka examine *The Impact of Customer Churn on Social Value Dynamics*. This article gives a view on the impact the social structures and their changes may have on business activity of telecommunication service providers.

The last article (*Digital Energy: Clustering Micro Grids for Social Networking* by Simonov, Mussetta and Zich) shows how the concept of user communities may help in the creation of smart micro grids allowing flexible and promising model for electric power delivery and distribution.

I would like to thank all the Authors for their valuable contribution to this issue of IJVCSN, which allowed us to present different aspects of evolving virtual communities and their influence on functions and services of information systems we utilize in our everyday life.

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