Please quote as: Krcmar, H.; Lyytinen, K. & Leimeister, J. M. (2007): Value Webs in the Digital Economy.. In: 40th Annual Hawaii International Conference on System Sciences (HICSS), Waikoloa, Hawaii, USA.

## Value Webs in the Digital Economy

Helmut Krcmar Information Systems TUM - Technische Universitaet Muenchen, Germany Kalle Lyytinen Weatherhead School of Management Case Western Reserve University Cleveland, Ohio, U SA Jan Marco Leimeister Information Systems TUM - Technische Universitaet Muenchen, Germany

In its fourth year the minitrack on Value Webs again attracted several diverse and interesting submissions. Value Webs consist of networks of partners who collaborate within different stages of interlinked value chains enabled by ICT. They form a basis for establishing a new interdisciplinary research field. Diffusion of Internet, web services as well as deployment of mobile and pervasive technologies result in both industry wide and organizational transformations with far reaching micro- and macro economic effects. These transformations are triggered by pervasive ICT infrastructures, and new products and services that enable sustained product- and process-innovations. Examples of such innovations include Zero Latency Business, Mass Customisation, Enterprise Application Integration, Collaborative Supply Chain Management, Mobile Commerce, and Customer Integration in product development and distribution. Each one of them echoes deep changes that the Internet and Mobile Technologies are creating in that Internet and Mobile Technologies affect now all facets of production, distribution and usage of information goods and significantly transform development-, production- and distribution of physical goods.

The impact of Internet is seen in a new wave of corporate strategies which recognizes novel competitive challenges associated with the existing value chains that are becoming dissolved or being totally reassembled. Competition shifts from inter-company level to competition over strategic partners and architectural control. This we call competition within and between Value Webs- the challenge of forging new value chain arrangements. Value Webs consist of networks of partners and competitors, which collaborate across and within various stages of value chain. The interactions within Webs are enabled and constrained by new ICT capability where value extraction draws significantly upon architectural responsibility and control.

The minitrack discusses the use and impacts of emerging technologies in interlinked value chains and how they support inter-business and interpersonal processes and relationships from technological, social and economical perspectives.

The first paper "Strategic analysis using value modeling – the c3-value approach" by Hans Weigand, Paul Johannesson, Birger Andersson, Maria Bergholtz, Ananda Edirisuriya, Tharaka Ilayperuma propose an extension of the E3 value modeling technique and method to support the analysis of business models. The proposed extension of e3-value to support strategic analysis refers to three dimensions: competition analysis, customer analysis and capability analysis.

The second paper "The Impact of Value on Governance Decisions for IT-based Alliances: Evidence from a Joint Venture in the Wireless Networks Industry" by Adamantia G. Pateli and George M. Giaglis addresses the issue of how to integrate new strategic and financial theories, such as Game Theory and Real Options Theory into the analysis of Value Webs. The paper provides a theoretically-based conceptualization of the expected alliance value and discusses a set of research propositions and hypotheses on the direct and indirect impact of firms' value expectations on their preference for the alliance governance mode.

The third paper "Bridging Business Value Models and Process Models in Aviation Value Webs via Possession Rights" by Vincent Pijpers and Jaap Gordijn introduces an approach to arrive at a business process model of a value web that is consistent with a business value model of the same value web. They propose a step-wise approach that starts with considering the independent transfer of ownership right of a value object and the actual object itself, and finally considers time ordering of these transfers..

Firms involved in open source software face inherent limits on their ability to appropriate returns from technological innovation. The fourth paper "Value Capture and Value Networks in Open Source Vendor Strategies" by Joel West examines the business models used by IT vendors given the limited appropriability available for open source software. It shows how firms capture value through complementary assets, while creating value and positive network effect through an inherent openness that attracts complementors, users and rivals to their corresponding value network.

We are confident that future more research attention is needed in understanding the antecedents, the structural features, design parameters and the outcomes of value webs in the digital economy.

Helmut Krcmar, Jan Marco Leimeister, and Kalle Lyytinen Minitrack Chairs

