Knowledge management deals with managing the creation, modification, storage, distribution and use of knowledge to improve efficiency and effectiveness. Although knowledge management is often associated with organizations, it could be successfully executed at any level: economy, organization, department, community, or individual. Knowledge economics, which is an important subfield of knowledge management, is defined as the financial impact of the creation, modification, storage, distribution and use of knowledge. Information Technology (IT), is the principal enabler and catalyst for knowledge management and support economies, organizations and individuals in their knowledge related initiatives.

This Minitrack is being offered at this Hawaii International Conference on System Sciences for the fourth time. It features a paper session of three contributions that have all passed the rigorous double-blind peer-review. Through the years, a variety of theoretical approaches towards describing the knowledge economics were presented. Topics covered range from Crowd Capital to a discussion of current trends in the field by analyzing contributions published in this Minitrack.

A review of this year's papers offered in this Minitrack confirm that traditional economic and conventional business models are frequently unable to describe and understand the complexity resulting from knowledge economics.

Moreover, the papers point to several promising research avenues, including the effects of human capital, environmental impacts and cultural influence. Thus, the contributions to this Minitrack are intended to close this understanding gap and clarify how the economic impact of knowledge-related processes can be measured and explained so that society can benefit from appropriate knowledge management.

The first paper, “Topics on Knowledge Management: An Empirical Insight into Articles Published in the International Journal of Knowledge Management” written by Carsten Brockmann and Narcyz Roztocki, addresses the evolution of the Knowledge Economics topic in the International Journal of Knowledge Management edited by Murray Jennex. The contribution is an expansion of previous work which has covered the evolution of knowledge economics as part of this Minitrack.

The second paper, “Knowledge Economics Based Upon a 4-Pillar-Model - A Field Report” by Alexandra Kees, presents a 4-pillar model which enables the design of an economically efficient knowledge management system. Moreover, this paper also presents and documents how this model is applied to establish a knowledge management system in the internal consultancy unit of a large German company from the IT sector. The author considers benefits and expenses, thereby enables the financial quantification of the effects resulting from introducing a knowledge management system.

The third paper, “Toward a Theory of Knowledge Economics: an information systems approach” by Martin Hilbert, argues that the analytical tools from computer science, information systems and information theory provide an adequate language to work toward a theory of Knowledge Society and Economics. The proposed method allows to describe, quantify and understand the general role of knowledge in economic dynamics.