The challenge of inter-organizational information availability and Industrial Symbiosis

Noel Brings Jacobsen
Roskilde University, Universitetsvej 1,P.O. Box 260, 4000 Roskilde, Denmark
njb@ruc.dk

Abstract
Industrial symbiosis takes the spatial embedding and agglomeration of industrial activity as the key to improving industrial sustainability. Industrial symbiosis prescribes that wasted material, water or energy from one industrial process can serve as feedstock for another industrial process thereby advancing the vision of industrial ecosystems by which virtually nothing goes to waste and higher levels of resource utilization can be reached. This ‘extended view’ or system view of environmental concern raises some fundamental challenges, but also has a potential for improving industrial sustainability. The understanding of the factors and processes leading to establishment of industrial symbiosis synergies has become an explicit challenge. On the one hand has techno-economical and environmental factors been highlighted as central factors in IS implementation processes. On the other hand has also more social oriented factors been seen as central. However, in which way and under what circumstances these factors are important and how they interrelate is still an open question. The objective of the paper is to discuss the role of social oriented factors like inter-organizational information availability in the process of facilitating industrial symbiosis. A special emphasis will be given to the role of information technology, inter-organizational information availability and the challenge of organizing industrial symbiosis input-output matches.