

SOUTENANCE DE THESE

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soutiendra sa thèse de doctorat

sur le sujet :

Digital ecosystem: towards a system of information systems

A l'université de technologie de Compiègne Le vendredi 23 mars 2018 à 14h Amphi L.103 – Centre Pierre Guillaumat

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Abstract

Recently, with the rapid technological advancement that we are witnessing in the domain of Information and Communication Technology (ICT), many Information Systems (ISs) are introduced into our lives either at home or at work. That will cause growing challenges for the users, such as the need for managing huge amounts of resources and the difficulty to collaborate with others. In order to find the right information at the right time to make educated decisions, users have to look for resources distributed in many ISs (emails, social networks, wiki pages, electronic notes etc.). The process of searching for resources in different ISs is costly and time-consuming; therefore it needs to be optimized. The emergence of Digital Ecosystems (DE) presents the users with the potential for improving the accessibility and coordination of different systems. On the other hand, comparable to DE, a System of Information Systems (SoIS) is comprised of integrated ISs which are heterogeneous and independently operable on their own but are networked together for a common goal. The goal, as mentioned before, might be organizing and sharing of heterogeneous resources.

This thesis focuses on moving from Digital Ecosystems towards a System of Information Systems as a solution to the emergent challenges facing users of different ISs in a collaboration context. The SoIS gives the opportunity to explore how collaboration can be enhanced through a combination of different ISs in the digital environment of organizations. In this context, we defined a semantic model and an architectural model of SoIS. We then developed a prototype, called MEMORAeSoIS, based on these models as collaboration support. This prototype can provide the ability to index, share, annotate, and recommend important resources coming from different ISs.