Mini-track ID: AMCIS-PR-080-2008
Mini-track title: Sustainable Information Systems - Technologies, Challenges and Opportunities
Track: General Topics
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Description

The use of information systems and technology is on the rise and so are the resources that go into sustaining it. Estimates indicates that the amount of electricity used to power the world's data center servers doubled in a five-year span due mainly to an increase in demand for Internet services. The industry focus has been on uptime and not on cost, so companies have avoided the question of how their hardware, software and networks can be made more efficient. Indeed some initial work indicates that "greening" of information systems and technology must happen as an architectural effort and not as an afterthought. Investment in this area is growing. Industry indicators such as venture-capital investment in sustainable technologies in North America have more than doubled in the past two years.

Business strategies depend on the high availability of systems. Reducing the availability is no longer an option, so the only other option we have is to reduce the energy consumption footprint of these systems in order to make them sustainable in the long run. Most research conducted thus far relies on an economic or managerial angle of sustainability, but little has been done on the information systems and technology front.

Systems and technologies that can prove sustainable in the long run are of specific importance for researchers and practitioners alike. As researchers, we must assess the technologies, understand the challenges and explore new opportunities in the area of sustainable computing, be it the areas of solar power, grid computing or mobile computing. The architecture of sustainable systems should align with the goals of an organization, and not be addressed as an afterthought. This applies to both infrastructure providers and the consumers of information systems and technology. Efficiencies in any information system will depend on the efficiencies of hardware, the footprint of software and the nimbleness of networks. Sustainable information systems should address this picture as a whole.

This mini-track provides an outlet for assessing technologies, understanding the challenges, both strategic and tactical, and explore opportunities that present themselves through a portfolio of sustainable information systems and technologies.

Suggested Topics

- Economic perspectives in sustainable information systems.
- Portfolio approach to sustainable information systems.
- Design, implementation, and evaluation of sustainable information systems.
- Organizational, managerial and strategic issues in sustainable information systems.
- Emerging technologies in sustainable information systems.
- Adoption and diffusion of sustainable information systems.
- Global issues in sustainable information systems.
- Case studies in sustainable information systems.
- Mobility, networking and sustainable information systems.
- Software design and network efficiencies for sustainable information systems.