
Call for Papers

Information Technology and Management Special Issue on Information Systems to Support Sustainable Consumption and Sustainable Supply

Responding to rising concerns about environmental sustainability, governments around the world have committed to the promotion of more sustainable consumption patterns. Mainstream approaches to promoting sustainable consumption often involve government interventions: to correct prices, and to provide regulatory frameworks to influence producers to become more eco-efficient. Unfortunately, the success of these actions is frequently limited by information barriers. Consumers have limited information about the social and environmental impacts of products, and have long relied instead on price information as well as information available on the product package in making their buying decisions. This lack of information creates difficulties for consumers when assessing and understanding the implications of their choices. Similarly, lack of integrated information about environmental impacts in the sustainable supply chain could potentially disrupt the entire system. These disruptions could, in turn, create higher costs for actors in the supply chain.

Despite the connection between sustainable consumption and sustainable supply chain management, current research shows little integration between these areas. Recent technological developments have the potential to uncover the “black box” of supply chain processes, helping consumers to make more sustainable buying choices. These innovations have the capacity to streamline the information flow from producer to consumer within supply chains. Ontologies, Linked Data, and Semantic Web technologies can handle the problems that arise when integrating massive amounts of multi-thematic and multi-perspective information from heterogeneous sources to answer complex questions that cut through supply chain domain boundaries. The innovative use of technologies such as WiFi, Radio Frequency Identification (RFID) tags, smartphones, Quick Response (QR) codes, and social media enables information tracing as well as opening supply chain information to the public, thus reducing the “information asymmetry” that pervades modern supply chains. Reducing barriers to information would benefit not only consumers but also other actors in the supply chain.

Our special issue focuses on how information technology can be leveraged to support transparency of supply chain and consumer trust in order to support sustainable consumption. One of the key objectives, besides promoting in-depth discussion on the technological, social, economic, and political implications of developing sustainable supply chain, is to bridge the research gap between sustainable consumption and sustainable supply chain literature.

In addition, we seek to expand and incorporate various research approaches and methodologies including but not limited to theoretical framing, empirical studies utilizing quantitative and qualitative data collection and analysis, modeling, and simulation. Further, papers on Semantic web approaches that describe the theory and practice of storing, accessing, searching, mining, processing, and visualizing big data are invited. Multidisciplinary perspectives connecting the study of information technology with design science, economics, organizational studies, and political science are particularly encouraged.

Topics may include but are not limited to:

- Stakeholders involvement in designing information systems that support sustainable supply chain and sustainable consumption

- Process modeling of sustainable supply chain integration
- Semantic technologies to support sustainable supply chain integration
- Methods and models to deliver trusted supply chain information to consumers
- Interoperable data architectures that support the integration of sustainable consumption and sustainable supply chains
- Information architectures that capture the diversity of various certification schemes to inform consumers and help supply chain participants to build more sustainable products and services
- The antecedents, processes, and impacts of trust development using information systems to support sustainable consumption
- Consumer perception, intention, and behavior changes when provided with multiple dimensions of product information, such as health, social, and environmental dimensions
- Crowd sourcing and use of social media in supporting sustainable consumption
- Economics of electronic markets for sustainable production and consumption
- Simulation models to study market responses and other interactions among information systems, inter-organizational dynamics, and social processes that are useful for developing systems to support sustainable supply chain integration
- Governance models and public policies addressing the openness of the data to support traceability and other public benefits without hampering the competitiveness of businesses.
- The role of governments or international governing bodies in ensuring smart data disclosure and integrity of product information.
- Globalization of information systems in terms of, product information standard, market, consumption, and sustainability.
- Semantic interoperability and heterogeneity
- Knowledge discovery from linked data
- Applications of semantic technologies and linked data

Keywords: Sustainable Supply, Sustainable Consumption, Public Policies for enhancing Data sharing and transparency, Simulation models, Semantic Web.

Questions pertaining to this special issue may be sent to any of the editors.

Guest Editors:

Jing Zhang

Associate Professor of Management Information Systems

Graduate School of Management

Clark University

950 Main St., Worcester, MA, 01610, USA

ph. + 1-508-793-7102 (Work)

ph. +1-508-793-8822 (Fax)

Jizhang@clarku.edu

Luis Luna-Reyes

Professor of Management Information Systems

Universidad de las Americas Puebla, CS 213 F

Ex – Hacienda Santa Catarina Martir

Cholula, Puebla, Mexico, 72810

ph. + 52-222-229-2000 ext. 4536 (Work)

ph. + 52-222-229-2726 (Fax)

luisf.luna@udlap.mx

Holly Jarman

Research Assistant Professor
Department of Health Management and Policy
University of Michigan
hjarman@umich.edu

Joanne S. Luciano
Research Associate Professor
Deputy Director, Web Science Research Center
Tetherless World Constellation
Rensselaer Polytechnic Institute
jluciano@rpi.edu

Submission instructions: Use online submission system
<http://www.editorialmanager.com/item/default.asp>

When submitting, note the special issue: "Information Systems to Support Sustainable Consumption and Sustainable Supply".

Time line: All submission will undergo double-blind review by qualified reviewers and the Guest Editors.

Full paper submission: August 30, 2013
Send notification for revise/resubmit or rejection: Dec. 15, 2013
Resubmission due: March 15, 2014
Second round of review: June 15, 2014
Final Publication decision: August 15, 2014