Computers & Industrial Engineering

International Journal

Call for papers for Special Issue on

Industrial and Transport Business Dynamic Ecosystems for Decision Making

Aim of the Special Issue:

Complex Adaptive System (CAS) are characterized as systems of multiple loops and chains, loops within loops, mutual cross feed relationships connecting them, inhibitory connections, and preferential reactions given different state events.

Unfortunately, the relationships connecting the system components are not always easily visualized as tangible flows but instead as several intangible flows with hidden dynamics that impact system behaviour. These intangible flows have an influence on system sustainability, and success or failure of system functionality.

There are several modelling approaches to describe CAS as ecosystems and analyse its dynamics by means of digital simulations. Thus, for example, business ecosystems are used to formalize a network of interlinked companies, such as suppliers and distributors, who interact with each other, primarily complementing or supplying key components of the value propositions within their products or services.

Business ecosystems simulation models can contribute to better predict the hidden dynamics of innovation in transport industry. The proper coordination of time-stamp intangible flows such as ecosystem member's competence and trust, is key to improve knowledge products and services and overcome market acceptability barriers at early stages of the ecosystem. Thus, informal exchanges at certain time milestones provides the right pathways for open innovation and engage business ecosystem stakeholders to boost new challenge.

Deep understanding of the ecosystem dynamics would contribute to design control policies and mitigation mechanisms to properly drive the ecosystem to successful scenarios, overcoming gaps in knowledge/ skills and gaining access to critical resources, including financial capital.

Scope of the Special Issue:

The aim of this Special Issue is to address and learn how artificial ecosystem models can contribute to a better understanding of hidden and emergent dynamics in Industry and Services. The nature and effect of the dynamic interactions business ecosystem can have

profound implications for organizational success and determines the speed of the ecosystem's evolution to keep it sparkling, offering more competitive industrial opportunities.

Submissions of scientific results from experts in academia and industry are strongly encouraged. The topics of interest include, but are not limited to:

- Causal Modelling frameworks
- Intelligent Transport ecosystems,

- Business Models for multi-stakeholders cooperative success
- Supply Chain ecosystems
- Logistic ecosystems
- Operations Management in business dynamic ecosystems
- Decision analysis

- Complex Adaptive Systems
- Agent Based Models to represent ecosystem dynamics
- Multi-Agent Systems for decision making.
- Transportation systems design
- Emergent Dynamic analysis
- Mitigation control mechanisms
- Modeling and simulation
- Chaos theory

The editors of the special issue intend to publish a range of diverse topics and reserve the right to limit the number of papers included in one topic.

Submission Guidelines:

Manuscripts should be submitted through the publisher's online system, Elsevier Editorial System (EES) at http://ees.elsevier.com/caie/. Please follow the instructions described in the "Guide for Authors", given on the main page of EES website. Please make sure you select "Special Issue" as Article Type and "Complex Adaptive Systems" as Section/Category. In preparing their manuscript, the authors are asked to closely follow the "Instructions to Authors". Submissions will be reviewed according to C&IE's rigorous standards and procedures through double-blind peer review by at least two qualified reviewers.

Publication Schedule:

Deadline for manuscript submission	Oct. 15th, 2018
Review report	Dec 15th, 2018
Revised paper submission deadline	Jan 15th, 2019
Notification of final acceptance	March 1st, 2019
Expected Publication (Tentative)	June, 2019.

Guest Editor:

Dr. Miquel Àngel Piera, Aeronautics and Transport Unit, Universitat Autònoma de Barcelona (Spain); miquelangel.piera@uab.es

Dr. Antonella Petrillo, Department of Industrial and Information Engineering, Università degli Studi di Napoli Parthenope (Italy); antonella.petrillo@uniparthenope.it