SIG 12 - RM&RP - Research Methods and Research Practice

We invite you to submit your research to explore the theme of **The Business of Now: the future starts here** for the EURAM 20th Conference.
We look forward to receiving your submissions.

ST12_03 - Research Methods for Complex Adaptive Systems

Proponents:
Davide Secchi, Research Centre for Computational and Organisational Cognition, U. of Southern Denmark; Raffaello Seri, Department of Economics, University of Insubria.

Short description:
This topic is open to research on a variety of methods that would help identify, describe, categorise, analyse, forecast, and/or evaluate those systems that show adaptability to a level that indicates complexity. Organisations show, to many extents, these characteristics and have been labeled complex adaptive social systems. While complexity is not new in management studies, recent technological developments and related methodologies have made it tractable. Hence, the topic is directed to any methods—qualitative, quantitative, simulation, hybrid, mixed—that show how complex adaptive social systems are, could, or should be studied.

Long description:
Proponents of this topic aim at attracting research that establish, describe, and develop the application of a wide variety of methods that tackle complex adaptive social systems (CAS; Miller & Page, 2007). Papers may have an open disciplinary focus (within management and organisation research) but should, at one point, outline how issues related to CAS are addressed.

Organisations have always been described as unstable, entropic, or complex (Burnes, 2005). However, it is only recently that social scientists have started to indicate that there are tools and techniques that are capable of grasping this characteristic (Secchi & Neumann, 2016). In fact, with the increase in processing machine power, computational techniques are on the raise in the entire spectrum of social sciences, while they still remain marginal in management and organisational research.

Even though this topic is open to any research method—qualitative, quantitative, mixed, hybrid, multiple—that tackles with management and organisations as CAS, it also invites scholars to submit their work on computational and mathematical simulation techniques. In particular, we encourage innovative spurious hybrid and/or multiple methods associated with computational simulations. A very interesting development is that of associating them to qualitative findings (Edmonds, 2015), for example extrapolating parameters from grounded theory (Neumann, 2015). Matching computations with quantitative experimental or survey designs is also of particular interest (Windrum et al., 2007; Moss, 2008).

We aim at attracting methodological points, case study applications, technical advancements, software developments and applications, epistemological and philosophical views, and studies that simply apply qualitative, quantitative, computational and/or mathematical techniques (broadly defined). In an attempt to develop and grow the application of this set of techniques to management and organisation research, more critical and/or skeptical points are also extremely welcome. Computational/mathematical papers relevant to this topic may include but are not limited to system dynamics (Roberts, 1983), discrete-event simulation (Brailsford et al., 2014), agent-based modelling, social network analysis, cellular automata (Miller & Page, 2007), Monte Carlo simulations, and the more traditional varieties of equation-based models and simulations (Gilbert & Troizsch, 2005).

Keywords:
multiple methods
hybrid methods
computational simulation
agent-based modelling
mathematical modelling

UN Sustainable Development Goals (SDG):
Goal 3: Good health and well-being for people, Goal 4: Quality education, Goal 5: Gender equality, Goal 6: Clean water and sanitation, Goal 7: Affordable and clean energy, Goal 8: Decent work and economic growth, Goal 9: Industry, Innovation, and Infrastructure, Goal 10: Reducing inequalities, Goal 11: Sustainable cities and communities, Goal 12: Responsible consumption and production, Goal 13: Climate action.

Publication Outlet:
Journal of Artificial Societies and Social Simulation: we know and are in contact with the editor (F. Squazzoni)
Kybernetes is a journal that is interested in this topic; one of us (D. Secchi), sits in the editorial board
Springer contact in New York for an edited book (depending on the number of submissions)

For more information contact:
Davide Secchi - secchi@sdu.dk

AUTHORS GUIDELINES
http://www.euramonline.org/submissions-guidelines-2020/authors-chairs-dicussants-guidelines.html