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■ *Editorial*

Systemic Approaches for Business Innovation and Sustainability. Editorial Note to the Special Section for the 2nd B.S.Lab Symposium—Rome 2014

INTRODUCING THE B.S.LAB 2ND INTERNATIONAL SYMPOSIUM

The Second Business Systems Laboratory International Symposium (http://www.bslab-symposium.net/) on "*Systems Thinking for a Sustainable Economy Advancements in Economic and Managerial Theory and Practice*" was held in Rome (Italy) on 23–24 January 2014. More than 200 participants from 52 countries attended this conference, and 109 presented their research in 11 sessions covering a wide range of topics in Business Science: *Advancements in Systems Thinking. The Path Towards Sustainable Social Systems* (chair: Maurice Yolles); *The Viable Firm. Consonance, Value and Sustainability* (chair: Frank Stowell); Evaluating Sustainable Development (chair: Andrè Martinuzzi); Sustainable Marketing (chair: Diane Martin); Technology and Smart Improvements for a Better Living (chair: Arabella Mocciaro Li Destri); Education for Sustainability (chair: Ockie Bosch); Business Models for Sustainability (chair: Arturo Capasso); Corporate Social Responsibility and Ethics (chair: Mauro Sciarelli); Economic Development in Time of Crisis: Problems, Solutions and Sustainability—Workshop (chair: Josè Rodolfo Hernandez Carrion); Finance in Time Of Crises—Workshop (chair: Enzo Scannella) and the Poster Session (coordinator: Giancarlo Scozzese).

THE RELEVANCE OF SYSTEMIC APPROACHES IN BUSINESS SCIENCES

Our times are characterized by intense transformations in the competitive logics of markets and, broadly speaking, of business systems. Business scenarios today are typified by dynamism, connectivity, nonlinearity, and emergent properties—in other words by 'complexity' (Dominici, 2012). The systemic approach has been pivotal to open new lenses and understandings of the inner dynamics of complex systems. In recent times, we have witnessed a paradigm shift in the managerial approach from the whole/part model to the systemic-environmental approach. This shift generated the epistemological frame of the systemic approach to social sciences in the fields of sociology, management and economics (Pitasi and Dominici, 2012).

The previously mentioned shift has been fuelled by continuous rapid changes in society, organisations and markets and has undermined the concept of alleged stability of the business context, causing a boost in all three factors of complexity: economic, technical, and socio-psychological (Dominici and Palumbo, 2013). Economic complexity refers to the changing of relations among business players; technical complexity encompasses the drive towards more flexible technologies; socio-psychological complexity refers to the social behaviour of the consumer (Dominici and Palumbo, 2013).

These factors need to deal with the larger system that is that of the whole ecosystem, in order to avoid to threaten the possibility for future generations to benefit of systemic improvements. In other words, any change, improvement and development of a business system must be effective in the long term; hence, it must be 'sustainable'.

In this special section, we will deal with the different dimensions (economics, technical and socio-psychological) of the sustainable and effective management of complexity for organisations by the lenses of different systemic methodologies.

THE ARTICLES IN THIS SPECIAL SECTION

For this special section, we chose three papers (coming from researches presented at the B.S.Lab Symposium 2014) considering three different approaches and some of their applications to business studies. The articles present different methods and means for determining and assessing effective and sustainable application of systems thinking to business creation, management and development.

The first paper describes the contribution of the viable systems approach (VSA) to the analysis of sustainable business behaviours. Barile *et al*. introduce in the discussion the contribution given by Italian school of the VSA. The VSA is strictly connected with the more internationally known Beer's viable systems model (Beer, 1972) from which it further develops the study of the adaptation of viable systems to the context, stressing the influence deriving from other overlying systemic entities in the environment (the suprasystems) and from the continuous quest for consonance with them. The VSA gives a special focus to the homeostatic interactions between the viable system and its suprasystems, which brings about continuous changes in the system to follow the dynamics of the environment (Dominici and Palumbo, 2013).

In the paper presented the authors propose the conceptual model of 'the viable systems cycle', as a novel approach to the analysis and interpretation of sustainability that concerns the relationship among efficiency, effectiveness, and sustainability itself and the way they orient and influence sustainable business behaviours. The aim of the paper is to constitute a theoretical and methodological base from which to reach a measure of sustainable value that, including the relevant dimensions for the specific organization, can respond to the needs of multi-dimensionality and expansion of perspectives. The article argues how, as the stakeholders' expectations generally differ, the decision maker needs to harmonize them to implement the value creation process while at the same time considering the social role of businesses. They point out that if the social role of companies is fully recognized, then ethical behaviour and economic performance are not to be considered as contrasting. Authors underline how a 'philosophy of sustainability' must be taken into account in order to define responsible strategies, make ethically correct choices, and implement models of governance that meet the expectations of the other entities of the context, this ultimately resulting in an intangible key asset that is corporate reputation. The methodological framework proposed by the VSA helps to formalize the concept of sustainability and define the criteria for action that must guide the governing body of a socially responsible organization. The proposed theoretical model of the viable systems cycle links performance measures to its three dimensions (efficiency, effectiveness, and sustainability), so that the decision makers can have quantitative references for their actions.

The second paper proposed in this special section deals with the creation of new business by applying the Evolutionary Learning Laboratory (ELLab) methodology (Bosch *et al.*, 2013) for creating a business model. In this article, Kiura *et al*. aim to validate the effectiveness of systems thinking for new businesses creation. The study represents a pilot application in using the well-proven systems-based ELLab methodology to create a business model that includes a more effective learning cycle, with systems thinking as the foundation. The paper also provides a critical evaluation of whether a systems thinking approach could better guide the convergence of customers' understandings/mental models with the product/services supplied by the firm.

The proposed model includes both advantages of the 'lean start-up' methodology and 'participatory system analysis' in applying the systems-based ELLab methodology. The ELLab methodology helps to deal with complexity by modelling an ongoing

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learning cycle able to refine and adapt the business model over time. The entrepreneurs become agents of customers and stakeholders for the implementation of the different processes of the cycle, as well as supervisors of the learning cycle over time. The authors conclude that the creation of a business model through this approach has the advantage to provide a more holistic view that is effective to identify the leverage points that could address issues, biases, and existing insights of target groups towards the identification of the seed ideas for creating the foundations of a new business model. Moreover, this approach can assist the entrepreneurs to comprehend the relationships between the mental models of the stakeholders and those of the customers and use this understanding to develop an effective business idea. In other words, the model proposed in this article may serve as a 'thinking map' to implement a continuous, and systemically adapting learning cycle.

Finally, in the third article, Hielscher and Will introduce a qualitative empirical research method (named GABEK) for systemic sustainability research. The article interprets systemic corporate sustainability as a research program considering the company and its environment as an ongoing process of social construction where the mental models of relevant actors are crucial. The proposed GABEK model can contribute to systemic sustainability research by helping to better analyze the mental models of diverse actors within the inquiry of empirical research. Moreover, the authors apply this method to a company (BASF AG) by using the tool of linguistic nets. In this case study, the authors reconstruct BASF's mental model of sustainability as a pro-active 'win-win' approach that incorporates the sustainability concept into the company's functions and processes of innovation and risk management.

CONCLUSIONS

All articles within this special section present different methods and ways for determining and assessing the application of systems thinking in the business management field, while considering sustainability as a key issue. The advancements and methodologies proposed are urgent and important for all kinds of organisations irrespective of their size and property. Through the diffusion of these approaches, we hope to contribute to the scientific debate and promote the participation in the dissemination of scientific advancements that may stimulate the progress in the field of business science.

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