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## Self-adaptive organizations: The evolution of organizational models inspired by microbiology

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This paper provides an overview on the self-adaptation considered as a human skill that we can train and develop in order to balance our organizations. We try here to explain what kind of organizational structures and behaviours can be used to facilitate and accelerate transformations and changes in our economic and social contexts. We are facing fast changes and new problems in economy and society. This current complexity requires new perspectives in designing and managing organizations. We strive to create organizational models and techniques that are as robust and versatile as biological organisms are and evolve in nature. Self-adaptation is an attribute of several systems in nature: it allows the reliability and scalability of recursive processes based on adjustment of collective behaviour of elements and without a central control of structure. Observing adaptive organisms biology focuses on processes at the sub-organism level. Using the latest molecular and physiological tools the adaptations of organisms to environmental stresses are studied and developed. The regulatory mechanisms are understood, including the genetic constraints, the physiological plasticity and the evolutionary history of the responses of organisms. Leafing through a biology book you will be fascinated by the multitude of self-adaptation solutions implemented by natural organisms: plants, animals and micro-organisms convey crucial information for an understanding of the effects of an environmental change on the organisms and the effects of organisms on the environment change. We suggest an approach able to catalyse transformation in people and organisations exposing behaviours and structures able to optimise themselves. These catalysers sometimes are people (change agents), sometimes are things (digital technologies) and sometimes are pieces of culture (knowledge and experience) and more often are combinations of these three factors. This approach has been used in this research for collecting and analysing results achieved in more than 5 years of projects evolution in the change management field.

### Biography:

Paola De Vecchi Galbiati is a Managing Consultant and researcher in business model innovation. She helps company to re-design their organization with the full involvement of staff. Experienced in project and change management in large and medium companies across several sectors she is focused on Innovation. Paola has a strong background in Project and Change Management, for multinationals in Europe, Asia and USA. She has written and published articles for both academic and professional journals on leadership and innovation. She's Visiting Lecturer at Università degli Studi Statale di Milano, Philosophy Department - Master for education experts: she teach Innovation in education applied to specific learning disorders. She's Board Member of Chinese American Scholar Association, a not-profit organization born in 1989 that runs eLeader conferences, international events in which global issues are addressed: Distance Education, Entrepreneurship, E-Commerce, Ethics and Social Responsibility.

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