

# COMPLEXITY IN MANAGEMENT: OPPORTUNITY OR THREAT?

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Complexity is a new way of thinking about the world (Snowden Boone, 2007). Some of the attributes of complex phenomena is uncertainty, non-linearity, self-organization, turbulence, and unpredictability. In the situation of dynamically changing external and internal conditions of its functioning, an organization can survive and grow only when it is able to successfully adapt its changeability to the changeability of the environment in which it is operating (Penc, 2002, p.51). The existing and applied systems of decision-making are often inadequate to the new challenges encountered by enterprises.

Current economic activity is characterized by the forces of globalization, technology, deregulation and democratization collectively creating an extremely complex operating environment for companies and policy-makers. This uncertainty and complexity creates risks but also opportunities to create new competitive advantage (Uhl-Bien et al. 2007).

The “Complex” view of reality is important in understanding the activities of an organization. The inclusion of complexity in management discourse is, therefore, a natural consequence. Management science generally admires order because it provides structure and predictability. The classic / linear world of management is challenged and needs to give way to new dynamic, ‘living’ concepts and organisms and at different multi-dimensional levels.

Complexity is a cross-disciplinary field made up of a number of disciplines, methods, and sciences, e.g. from non-equilibrium thermodynamics, chaos, artificial life, complex networks to sense making theory. But, on the other hand, complexity allows an open horizontal dialogue among domains, sciences, and disciplines that were traditionally separated, hierarchically split, and even indifferent to each other. Complexity has come to pervade the problems in management too. The most visible is the relationship between complexity and organizational studies, leadership, strategy, innovation i.e. resilience. Some of these relationships are more mature whilst the others remain in preliminary study. It is generally accepted (Stacey, 2002; Burns 2005; Snowden Boone 2007, Hummelbrunner Jones 2013) that management should be perceived as a complex system operating at the edge of chaos.

But, how indicated, for example Hummelbrunner Jones (2013), McKenna (2010), Hansen (2012), translation of complexity (complexity theory) into management action is troublesome. Nevertheless, complexity theory has utility because it encourages managers and scholars to relinquish the natural tendency to control all activity from a cause and effect perspective; a perspective that is diminishing in usefulness in a hyper-turbulent business environment (Smith, Graetz 2006).

Complexity is a unique problem facing companies and from the literature reviewed, one key trend has been that it can be managed by simple but unique strategies. Complexity cannot be entirely eliminated from organizations; however, it can be reduced to manageable levels. We observe an increased number of publications related to complexity in academic literature on management. For example, according to Elsevier journals database, the number of articles in the 2000-2014 period increased almost sixfold. The biggest increase is in 2011-2014. In 2014, more than 5,000 articles were published in this database.

Looking at the new operational conditions, researchers and practitioners are searching for management methods that fit in with the new challenges connected with the complexity, uncertainty and instability of the environment in which the organisations operate.

One of the models, that explains and supports complex decision making processes in the choice of a strategy for action is Cynefin. The Cynefin framework advocates the use of narrative for understanding complexity and emphasizes the social aspects of sensemaking taking into account various environmental circumstances<sup>1</sup>.

However, it seems that the development of modern management without a complexity view, is not possible. Just the opposite - including the complexity and its effects (opportunities and threats) makes it possible to find the right management systems and build strategy.

I hope that the discussion above will encourage you to take the complexity of getting acquainted with the latest studies of the issues of management of modern organizations and that you will find “added value” in them for yourselves.

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<sup>1</sup> Cynefin was originally developed in 1999 by D. Snowden during works on models of knowledge management and business organisation strategies. From 2002, works began to include in this model the theory of complex adaptation systems, which resulted in Cynefin becoming a model of a general strategy. D. Snowden's works were conducted in cooperation with C. Kurtz at Institute of Knowledge Management IBM, and since 2005 (after D. Snowden left IBM) works on the model have been continued as part of the Cognitive Edge network.