

## Characteristics of Complexity Leadership in High Uncertainty Situation Caused by COVID-19 Pandemic

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### Abstract

**Purpose of the article** Development of digital technologies effects on dynamics, self-organization and creation of new order of contemporary business environment, in which high speed and accurate recognizing of changes is crucial. The COVID-19 pandemic only increased importance of this competence. The aim of the research was to identify the behavior of SME leaders in a situation of high uncertainty caused by the appearance of the COVID-19 virus. SME was assumed to demonstrate greater adaptability in the face of pressure than big enterprises.

**Methodology/methods** The research was based on qualitative approach. The selection of cases for the research sample was purposeful. From the group of identified companies willing to take part in the study, four cases were selected that meet the selection criteria - primarily corresponding to the characteristics of complex adaptive systems. Finally, the case with the greatest consequences of the crisis was selected for in-depth exploration.

**Scientific aim** The main aim for the research was to identify the leadership behavior in context of situation caused by unpredictable external circumstances. The complexity theories were adopted as the theoretical ground for the considerations, which has opened opportunity to approach uncertainty differently than it results from the theory within normal science.

**Findings** The studied cases of companies, in the face of high uncertainty, undertook various activities - from "stop and wait" to activities in completely new areas of activity. The obtained results made it possible to identify the sequence of specific events that translated into a specific trajectory of the organization's development in a crisis situation. In each case, the use of the network of external relations was of key importance for the survival of the company, although various attitudes were identified here - from the protection of internal resources at the expense of exploitation of external relations, to completely opposite. The biggest consequences of the changes were present in the company that looked the most opportunities beyond the borders of the existing (external) cooperation networks.

**Conclusions** The findings help to explain how leaders make sense of unexpected circumstances and how this process can yield different outcomes for organizations. Taking complexity into account allows for considering ways to absorb uncertainty (as opposed to its reduction). This approach creates a promising opportunity to eliminate the gap between the representatives of management theory and practice in ever more uncertain "Digital Age".

**Keywords:** Leadership, Uncertainty, COVID-19, SME

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