

# Phenomenon of Information: A New Perspective on Cognition and Decision-Making

Authors:

Vratislav Pokorný<sup>1</sup>, Jiří Koleňák<sup>1\*</sup>

<sup>1</sup>NEWTON University (Vysoká škola NEWTON, a.s., Kongresové centrum Praha, 5. května 1640/65,140 21 Praha 4, Czech Republic - \*Corresponding author email: jiri.kolenak@newton.university

**Abstract.** We present and broadly discuss selected topics to understand the phenomenon of information in a modern and natural environment. These are observations and considerations from the perspective of Cognitive Management<sup>1</sup> to the conception of the essence of the nature and behavior of information in terms of cognition, reasoning and decision-making of people and human systems in relation to situation and event, task and problem, system and context. As one of the options for solving this problem, we present a supplemented and modified pilot version of the multidimensional and multiparametric model<sup>2</sup> with application potential for selected dimensions and parameters of the whole system (person, situation and task/problem), in terms of cognitive possibilities for effective adaptation, reasoning and decision-making of people and small professional teams in changing conditions and circumstances of situations.

**Keywords:** Information, Cognition, Cognitive management, Decision-making, Systemic thinking, Ontology, Cybernetics, Entropy, Artificial intelligence, Epistemology.

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<sup>1</sup>Cognitive management was presented as a concept dedicated to the management of cognition for reasoning and decision-making of people and human systems in situations for which it is impossible to prepare, for which no standardized algorithm is applicable, or with which previous experience is not consistent or does not correspond and thus cannot be transferred or apply [1].

<sup>2</sup>The multidimensional model [2] was created for the needs of quantifying the qualitative parameters of the whole system of person – situation – task/problem.

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## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Relevancy	3
1.2	Goals and Objectives	12
<b>2</b>	<b>Theoretical and Conceptual Background</b>	<b>16</b>
2.1	The phenomenon of information and possible views on its significance, meaning, utility, and purpose.	20
2.2	Natural and artificial environments in terms of cognition, decision-making and action	54
2.3	Thinking, critical thinking and cognitive competence.	99
<b>3</b>	<b>Multidimensional and Multiparametric Model<sup>i</sup> (person - situation - task)</b>	<b>127</b>
3.1	Conceptual aspects and starting points of the model.	127
3.2	Selected Categories, Domains, Dimensions, and Continuum Model.	136
<b>4</b>	<b>Benefits of the Model</b>	<b>171</b>
<b>5</b>	<b>Conclusion</b>	<b>175</b>
5.1	Synopsis	176
5.2	Further Research	179
	<b>References</b>	<b>182</b>