

Research On the Potential Application of System Dynamics in The Concept of Value Based Management and its Practical Implementation*

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* Presented at the 42nd IBIMA International Conference, 22-23 November 2023, Seville, Spain

Abstract

From a general perspective of purpose and motivation, the research is focused on examining the validity of shifting the management paradigm in terms of applying the value based management concept and aligning the principles of value based management with a systemic approach to the enterprise. Through the method of system dynamics and the creation of a model of the company, it will be checked how fundamental relationships and connections between system elements work, as well as simulating the impact of individual key variables on the company's value movement. Unlike the topic of value based management, research in the direction of developing system-dynamic models of companies has not yielded a large number of works, and they can generally be classified into two streams, one characterized by research focused on qualitative descriptions of the behavior of company systems without model descriptions and conducting simulations, while the other stream consists of models, but only of parts of business activities or parts of business functions. As the leading method in developing a company model and setting the foundational scenario and then conducting business analysis, the method of system dynamics will be used. In the actual creation of the model of the business entity's system elements and mathematical relationships of elements, the software tool Powersim was used. Since the application of system dynamics in the domain of value based management has not been extensively researched, the scientific contribution of the work lies in recognizing and understanding the operation of a company in general, as well as in the context of optimizing value based management in a dynamic and complex environment.

Keywords: system dynamics, company model, value based management