

Value-based Project Management

Een aanpak voor chaordische projecten
vanuit het perspectief van het complexiteitsdenken

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Summary (in English)

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A design study to develop a projectmanagement approach for chaordic projects from the perspective of complexity thinking.

Contemporary project management suffers a crisis. In the past two decades, ICT projects were only successful in 30% of the cases. Also, six to nine out of ten innovation projects fail. Large infrastructural projects do exceed time and money restrictions by 50 to 100%, while 65% of global mega projects fail in achieving their organizational goals. Strong dissatisfaction of stakeholders about the progress and results of the projects is not an exception. Most of these projects are characterized by a mixture of high complexity, high uncertainty, fuzziness, pace, and novelty, while the

current approaches to project management are firmly based in the paradigm of reductionism, and are only suitable for projects with just a limited degree of complexity, uncertainty, ambiguity, pace, and novelty. Reductionism is hindering project success for complex, uncertain, fuzzy, innovating projects. Project success is defined as the degree to which stakeholders are satisfied with the effects of the project. In this thesis a project-management approach for complex projects is being developed.

This design research focuses on a special type of projects: chaordic projects. The new project-management approach consists of three ingredients: (1) Chaordic systems thinking as a holarchical lens; (2) Project success factors derived from practice; and (3) Modern management concepts. Furthermore, in this research there is much attention to the practical applicability of the design, ensuring a usable solution for field problems. This leads to the following research question: "Design a practical approach for managing chaordic projects, which integrates concepts of modern management, and increases chances on project success."

A diagnostic analysis of the above-mentioned problem is carried out by means of both a literature review and an empirical research. These studies show that established approaches to project management are mainly successful for projects with less complexity, uncertainty, fuzziness, pace, and novelty. To validate the assumption underlying this research ('concepts in general management are unused in project management'), bibliometrical analysis by computer counting was used. The main conclusion is that the concepts 'create', 'motivate', 'social', 'value', and 'trust' remains unused in project management. The other inputs for the design process (chaordic systems thinking and project success factors) were mainly based on literature review, while the interdependences between project success factors have been verified in practice. The research strategy chosen here is 'design science research'. This strategy integrates the regulative model cycle and the reflective model cycle, and aims the development of valid, reliable, and transportable knowledge, in order to solve field problems. 'Design science research' is based on the CIMO-logic: in case of problematic contexts C, use intervention type I, to invoke generative mechanism(s) M, to deliver outcome(s) O. Because of the emphasis on solving field problems, the new Value-based Project Management approach was tested in both a α -test (peer consultation with the participation of 18 project managers of complex projects) and a β -test (9 case studies of 8

weeks each). User validation was measured with a questionnaire, using 5-point Likert scales. Based on complexity thinking, it proved feasible to design a practical approach for managing chaotic projects that integrates modern management concepts, and increases chances for project success. Value-based Project Management consists of eleven interventions (Project's Eleven). These interventions are presented in the form of design propositions, using the CIMO-logic. The Project's Eleven triggers 22 different mechanisms. From the perspective of complexity thinking, these mechanisms were grouped according to an integral-theory framework. The interconnectedness of these mechanisms may lead to a higher level of intentional, behavioural, cultural, and social aspects of the project. In other words: the project is growing in maturity.