OPENING THE BLACK BOX OF SELF-ORGANIZATION IN NEW PRODUCT DEVELOPMENT - EVIDENCE FROM PROBLEM-SOLVING COMMUNICATION IN THE AUTOMOTIVE INDUSTRY

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Abstract
Traditional models and approaches to manage innovation consider NPD as a set of routinized problem-solving processes governed by organizational structures. Recently, scholars incorporated findings from complexity science to focus on self-organized, spontaneous and flexible behavior in NPD. However, research has not applied yet the topic of self-organization to non-routine problem-solving in nowadays highly virtual environments. Therefore, this paper studies how cross-functional teams organize themselves over time when solving non-routine problems in the fuzzy-front-end phase of innovation. It presents the result of a qualitative longitudinal case study of a project team working on the exterior car design at an automotive manufacturer. The research contributes to literature on innovation management and organization science in three ways. First, we identify four categories of self-organized practices successfully applied to solve problems. Second, we analyze the usage of identified practices as a function of routine newness. Third, we show the emergence of a new dynamic process of self-organized problem-solving.
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