Abstract

The aim of this dissertation was to analyze the impact of projects implemented within scientific consortia on the innovation of business models in enterprises. The research focused on systematizing knowledge of research and development (R&D) project management, assessing the significance of scientific consortia, and identifying changes in business models resulting from R&D activities.

The achievement of the main objective was based on three specific goals. The first (CS1) concerned the systematization of knowledge on R&D project management, highlighting their specificity, high level of uncertainty, and the necessity for flexible management. A hybrid project management (HPM) approach was presented, combining traditional, agile, and extreme methods.

The second goal (CS2) analyzed the significance of scientific consortia in the implementation of R&D projects. Research findings indicated that consortia facilitate risk reduction, acquisition of funding, and the establishment of strategic partnerships. The decision to cooperate within a consortium was primarily driven by the opportunity to leverage partners' resources and access funding.

The third goal (CS3) concerned changes in business models resulting from the implementation of R&D projects. The analysis demonstrated that enterprises adapt their market strategies and organizational structures as a result of implementing technological innovations. Business model flexibility proved to be a key factor enabling adaptation to change.

The research addressed questions regarding the impact of R&D project management on business models, the significance of consortia, and the effects of R&D project implementation. It was shown that enterprises participating in consortia achieve better results in terms of product and organizational innovation.

The analysis of research hypotheses allowed for the identification of three groups: confirmed, partially confirmed, and unconfirmed. Significant correlations were found between project leadership and the effectiveness of achieving project objectives, as well as the influence of project implementation methods on changes in customer

relations and key resources. However, no significant changes were identified in customer segments, distribution channels, or key partnerships.

In conclusion, this dissertation provides a comprehensive study on the role of scientific consortia in R&D project implementation and their impact on the innovation of enterprise business models. The findings indicate a positive perception of cooperation within consortia and the need for further research on optimizing collaboration mechanisms and introducing innovations. The obtained data may serve as a basis for further studies on the long-term effects of enterprise participation in R&D projects and their impact on market competitiveness.

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