

SUMMARY OF THE DOCTORAL DISSERTATION

1. Title of the dissertation: The Impact of Innovation on the Sustainable Transformation Process of the Enterprise
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4. Summary (min. 1 800 characters with spaces):

This dissertation is devoted to the identification and assessment of the impact of innovation on the sustainable transformation process of enterprises, with particular emphasis on the chemical sector. The point of departure was the assumption that contemporary enterprises operate under growing regulatory, environmental, and market pressure, and that sustainable transformation cannot be understood merely as a set of isolated pro-environmental activities, but rather as a multidimensional process encompassing strategy, organizational structure, processes, competencies, and stakeholder relationships. The main objective of the dissertation was to determine whether and how innovation supports the course of this transformation, what status sustainable transformation assumes in the enterprises under study, what role stakeholders play in shaping it, and whether it translates into competitive advantage understood in terms of organizational and process performance.

The dissertation is both theoretical and empirical. The theoretical part systematizes the scholarly achievements concerning sustainable transformation, innovation, the design of organizational change, and the measurement of effects within the ESG framework. The empirical part applies a mixed-methods approach, including a systematic literature review, an original PAPI questionnaire, a quantitative study conducted among 505 experts from the chemical sector, in-depth individual interviews, AHP analysis, and a case study of a chemical enterprise. The research procedure designed in this way made it possible not only to capture relationships between the variables under study, but also to deepen the interpretation of the mechanisms responsible for the course of sustainable transformation in business practice.

The findings indicate that the impact of innovation on sustainable transformation is differentiated and depends on the ESG pillar, the type of innovation, and the level of organizational maturity of the enterprise. The dissertation demonstrates that process and organizational innovations are of particular importance, as they form the implementation backbone of transformation, whereas marketing innovations gain significance especially in the social dimension because they support the legitimization of change and its acceptance by stakeholders. The research also showed that chemical enterprises most often pursue sustainable transformation through a hybrid model, combining project-based initiatives with a long-term strategic direction. Another important finding of the dissertation is the confirmation of the significance of stakeholders in the transformation process, especially customers, business partners, and regulators, although the strength of their influence remains dependent on the organizational context.

With regard to competitive advantage, it was demonstrated that sustainable transformation can enhance enterprise performance; however, this relationship is neither uniform nor automatic. The strongest effects emerge where transformation activities are embedded in management systems, linked to performance measurement, and supported by the organization's ability to learn and reconfigure its resources. This means that effectiveness is determined not by the implementation of

individual projects alone, but by the capacity to integrate them, prioritize them, and translate them into lasting organizational practices.

Of particular importance in the dissertation is the case study of an enterprise from the chemical industry, which serves both an explanatory and illustrative function. It makes it possible to translate the relationships identified in the quantitative analyses into actual organizational practices, investment decisions, initiative portfolios, prioritization of actions, and sequences of implementation over time. The case study shows that sustainable transformation in a chemical enterprise is process-based, multidimensional, and strongly context-dependent. It also confirms that the effectiveness of implemented measures depends not only on the innovations themselves, but also on the organization's ability to orchestrate them, connect them with management systems, and respond to external pressures, including B2B customer requirements, regulations, and reporting needs. The case study also made it possible to capture the uneven pace of transformation, indicating that in the chemical industry environmental domains are prioritized particularly strongly, while other areas develop in a more gradual manner.

As a result, the dissertation contributes to the fields of management and quality sciences by systematizing the relationships between innovation, stakeholders, change management, and the sustainable transformation of the enterprise, and by proposing an understanding of this transformation as a strategic and project-based process embedded in the ESG logic. The practical contribution of the dissertation lies in indicating that effective transformation in the chemical sector requires not only the implementation of individual innovations, but also their embedding within a coherent strategic, organizational, and measurement logic. The research confirmed that the durability of transformational effects depends on the enterprise's ability to integrate environmental, social, and economic objectives into the everyday functioning of the organization.