REVIEW

of the thesis of Kozhakhmetova Assel Kosherbayevna

"Evaluation of high-tech project success in the Republic of Kazakhstan based on international standards of project management" for the degree of Doctor of Philosophy (PhD)

"6D051800-Project management"

Thesis Relevance

The high-tech industry is one of the promising and rapidly growing areas of the world economy. The Republic of Kazakhstan has high potential and opportunities for the development of high-tech projects and the increase in its contribution to the national economy.

However, to date, the existing potential and opportunities are not fully utilized, and the impact of high-tech projects on Kazakhstan's economic growth is insignificant. This situation occurs due to the absence of proper project management experience and an immature innovative system that may support high-tech project development. Considering methodological approaches of project success evaluation and using it with a combination of management processes should increase the success and competitiveness of domestic high-tech projects, removing development barriers and securing stable growth of income from the high-tech industry for all involved stakeholders.

Under these conditions, research in the field of high-tech project success management and justification of recommendations for improving the management of high-tech project success in the Republic of Kazakhstan is a relevant and proper topic for dissertation research.

Thesis Novelty

The novelty of the thesis consists in developing new theoretical principles and substantiating practical recommendations for managing the success of high-tech projects as an essential link for the technological development of Kazakhstan. The results obtained allow us to propose new integrated approaches to the management of high-tech projects, as well as to build an algorithm for using project management processes for the success of high-tech projects.

Thesis Structure and Coherence

The dissertation work includes all required elements of the PhD dissertation: theoretical part, including an extensive review, analytical part with quantitative analysis and the final part with practical recommendations to improve high-tech project success management.

The first chapter discusses the theoretical and methodological foundations of high-tech project success management and PM standards used in the Republic of Kazakhstan and foreign countries. In particular, the conceptual apparatus of high-tech projects were studied; features of high-tech industries are considered; methodological

approaches to the management of high-tech projects and international PM standards are compared; the features of project management and the level of success of high-tech projects in foreign countries are analyzed.

The second chapter analyzes the infrastructure for the implementation of high-tech projects in the Republic of Kazakhstan and identifies barriers for the development of high-tech projects. In addition, this chapter was evaluated the level of high-tech project success in the Republic of Kazakhstan and the maturity of the application of PM processes using the proposed model; it identified critical processes of PM that affect high-tech project success.

The third chapter proposes approaches to improving the infrastructure conducive to the successful implementation of high-tech projects in the Republic of Kazakhstan; prepares recommendations for managing high-tech project success and an algorithm for the application of PM processes and tools for the management of high-tech project success.

Thesis Key Findings

Based on the analysis, the PhD candidate found answers to the next issues: a high correlation between using project management processes and high-tech project success; critical success processes that highly affect high-tech project success; project management tools and methods that increase the level of project success.

The significant results include but not limited by:

- 1. The author's definition of the concept of "high-tech project" and classification of high-tech projects.
- 2. The author's vision of criteria for evaluating high-tech project success measured by project owner success and project manager's success.
- 3. The study and systematization of foreign experience in the field of high-tech project management in developed countries, and an analysis of tendencies and factors affecting the success of high-tech projects and possibilities of their adaptation in the domestic market.
- 4. The analysis of the environment of the high-tech industry in Kazakhstan, determination of the maturity level of infrastructure development, and barriers constraining its development.
- 5. The quantitative analysis on the basis of the model that evaluates the success of the high-tech projects and its relationship with project management processes.
- 6. New approaches to the management of high-tech projects, the algorithm for managing the success of high-tech projects in the Republic of Kazakhstan.

In general, the research is built taking into account all aspects of the stated topic, namely: a review of approaches to determining the essence of the analyzed concept and an attempt to formulate the main methodological problems are made, an analysis of the data of a real projects is presented, an analysis of prospects is carried out. Conclusions are presented for each chapter.

Assel Kozhakhmetova conducted comprehensive research and presented a high-quality dissertation work that includes original theoretical and practical recommendations.

In my opinion, Assel Kozhakhmetova is an established researcher, and her dissertation work meets the high criteria for PhD thesis. Therefore, she deserves the award of the degree of Doctor of Philosophy.

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