

AFTERMATH

Conceptual bases of commercialization strategy formation for a specific high-technology product are defined. The conceptual foundations of «commercialization» and «high tech» economic categories have been restructured. Definitions of the «high-tech product» and «commercialization of a high-tech product» economic categories are proposed. The specific strategy is conceptually rethought through the reformation of high – technology and high – tech product life cycle strategic guidelines. The epistemological value of the synergetic research method application for high-tech sector is actualized considering the stochastic nature of international entrepreneurship. The purpose of the system-forming synergetic concept is identified, which is to stratify determinants of innovative systems genesis, determine their internal dialectic, taking into account the key role of the synergetic paradigm of international entrepreneurship. The study makes it possible to reveal the architecture of international entrepreneurship of modern high-tech sector and outline approaches to determining the commercialization strategy within world economy trends.

The essential characteristics of product commercialization models are determined, special attention is given to the models of “technological push” and “market pull”, based on the causal link between the stages of innovation process and the definition of demand as a key factor in implementing a high-tech product. The expediency of additional dependencies appliance is argued: “by the number of influencing factors”; «based on emergence of commercial ideas.» Monocomponent and multifactor econometric models application is justified within the high – tech products commercialization tools improvement process, given the high accuracy and indisputability as well as convincing adaptive and synergetic potentials of gained results of both abstract component and universal multifactor business models. To form a holistic view of commercialization modeling process in the work of the model of multiple generations, which differs functionally, by numbers as well as in scope of participants on creation of a commercially successful high-tech project.

The institutional bases of the infrastructural environment of commercialization of a high-tech product are investigated. The use of the system of institutions in context of the sixth technological stage model in

the aspect of high-tech products commercialization is offered. Based on the study of domestic and international experience, namely the United States, Japan and Germany, public – private partnership is identified as a a priority platform to ensure the effectiveness of an innovative product commercialization process at all production stages. System of innovative infrastructure institutional factors within context of the sixth technological wave is generalized, in particular the institutional macromodel outline is formed, which reveals interrelations of the following institutes: technology transfer; innovation culture, generation of ideas instrumentation, intermediation, regulation, HR and data support, financing, R & D branches support.

High-tech product commercialization trends within international business are outlined, which consist in balanced use of public administration levers, promotion of public-private partnership policies and systematic approach to stimulating SMEs activityto ensure development, interaction and diversification of high – tech products commercialization of domestic enterprises. System features of of the high-tech products market current state are highlighted: synergy; polybranch; unpredictability; hyperdynamic development. The expediency of using the system of indicators of scientific resources of countries is argued: the share of R&D expenditures in GDP; R&D expenditures per capita; the share of budget allocations for R&D in state budget expenditures; number of employees in R&D; number of international scientific awards; citation index; share of science – intensive products in GDP; the state’s of high – tech products world market share. It is substantiated that the most accurate diagnosis is achieved under the conditions of an adaptive indicators system application, based on macro- and microlevels market analysis, focused on shortcomings and potentials of its state and development. Peculiarities of development, production and commercialization of the leading countries innovation activities are investigated, formation of export potential branch priorities of the enterprises identified.

Theoretical and methodological basis of commercialization internal corporate factors analysis of international business reintegrated to the high-tech sector specifics. Enterprises grouped by field of production using the NBIC international classification, approximated to domestic specifics: pharmaceutical; electronics and communications; chemical. Intracorporate

factors are grouped as follows: economic relations; resource potentials. Further compact classification of resource potentials group offered: production; scientific and technical; financial; marketing; HR; public image. A questionnaire, comprised of grouped according to the proposed classifications questions is developed. Taxonomy method calculations performed.

Product commercialization mechanism adapted to the specifics of the high-tech sector. Core parameters of the composition of planning and economic model of the mechanism are reconfigured: preparatory; planned; operational; background blocks: systematical; controlling. Principles of backbone symphony of the mechanism are reconsidered: integrity; adaptability; structure; interdependence; hierarchy; proportionality; complementarity; dynamism; efficiency; decomposition; suboptimization. This study makes it possible to increase the efficiency of high-tech products commercialization in the system of international business and allows a comprehensive approach to solving interrelated problems of growth of competitive advantages of the domestic economy.

High-tech product commercialization multicriteria model of tools efficiency formed on basis of following system of criteria: economic; technological; financial; marketing; resources; social; ecological; public image; integration. The criteria are detailed to subcriteria level based on qualitative and quantitative performance indicators. Method of expert evaluations is used in order to apply qualitative indicators. The method of pairwise comparisons is used to calculate tools efficiency. Multicriteria corresponding values are the following: consistency index, maximum eigenvalue of inversely symmetric matrix of pairwise comparisons and local vector criteria. The model was tested within the pool of domestic high-tech enterprises data processing activities, the list of integrated high – priority efficiency subcriteria was determined: the level of production innovation; percentage of profit from the sale of licenses; added value of high-tech product (EVA); international product competitiveness; share of exports; investment rating; GDP per capita; depth of specialization of labor resources; number of hazardous substances per unit; business public image. The identified sub – criteria require development of strategic decisions on the mechanism further implementation.

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High-tech product commercialization strategy, which is composed of a pairwise comparison of significance factors that determine the potential of studied enterprises improved. Abel's three-dimensional model successfully applied to determine strategic directions of development, which will allow to calculate product commercialization effect within context of international business. Complex ecosystem of a high-tech product commercialization strategy for the 5th and 6th technological waves formed.