STRATEGIC MANAGEMENT OF DEPLOYMENT OF INNOVATION PROJECTS AT THE ENTERPRISE

Svitlana Breus, Kyiv National University of Technology and Design Taliat Bielialov, Kyiv National University of Technology and Design Mykola Denysenko, Kyiv National University of Technology and Design Andrii Zarichniak, Vasyl Stefanyk Precarpathian National University Alina Al-Tmeizi, Open International University of Human Development

ABSTRACT

The input methodological approach to the application of strategic management in the deployment of innovative projects at the enterprise is defined in the article. The model of strategic support of the progress of innovation process at the enterprise in the context of development and commercialization of innovative ideas was proposed. The expediency of using the criteria matrix to evaluate the position of the enterprise on the market with the purpose of making profitable strategic decisions was developed and methodologically substantiated.

Keywords: Strategic Management, Strategic Development, Innovation Product, Innovation Project, Criteria Matrix.

JEL Classifications: M21

INTRODUCTION

In the conditions of globalization of markets, blurring of borders of branches, change of the idea of strategic management and ways of their obtaining and retaining of strategic advantages, the important practical task is the search for new ideas on the deployment of innovative projects at the enterprise. The innovative nature of production is one of the most important factors determining the success of an enterprise in a market environment, its market stability and competitiveness. Implementing any innovation change strategy requires some transformation at the enterprise, which requires new methodological approaches and variations. It is these arguments that form the relevance of this study (Ahmed, 2010).

LITERATURE REVIEW

The wide use of strategic management technologies in scientific research is due to the works (Anderson & Markides, 2007; Tidd & Bessant, 2014). In the work (Chapman Wood, 2007) it is determined that the innovative development of economic and industrial structures is an integral part of the innovative development of the economy and an important aspect of the reproduction of strategic stability. Already in the work (Prajogo, 2016) it is stated that the choice of one or another strategy depends on the state of innovative projects (Drobyazko et al., 2019a, b &c).

METHODOLOGY

The methodological framework of this research is based on the fact that in the conditions of development of market relations and formation of a competitive environment it is innovations that become the dominant resource, capable of ensuring investment attractiveness, effective activity and competitiveness of the enterprise in national and international markets. It is strategic objectives aimed at a long-term perspective that form the possibility to introduce the achievements of scientific and technological progress in production.

RESULT AND DISCUSSION

Studies of the strategic behavior of an innovative product in the market indicate that industrial enterprises need to constantly monitor the development of science and technology to introduce the latest developments in these areas in the production process and timely phase out the use of obsolete products and production technology. The results obtained from the study of perspectives in the field of scientific and technical and technological progress are critical for the development of the general strategy of the enterprise in the market. Success depends on determining the time when you need timely enter a new product to the market and exit the market of obsolete technology (Sammut-Bonnici & Paroutis, 2013). In order to reduce the risk, it is advisable to have a set of products that are at different stages of their life cycle.

Certainly, the process of organizing innovative activity is not limited by these stages. Such things as feasibility study of technological innovation, sources of investment, resource support, evaluation of investment attractiveness of an innovation project, risk assessment of investment, evaluation of risk factors that may impede the successful implementation of projects are decisive in the process of deciding on the implementation of an innovative program.

The Figure 1 in general shows the process of developing and launching a new product on the market. The path from an idea to its practical implementation consists of ten steps that can be combined into three key stages: generation and selection of ideas; analysis, check and testing of a proposed idea; control of the strategic perspective of a new product, innovation commercialization, profits generation and redistribution.

The Figure 1 shows that the innovative project includes the main functional units involved in its implementation (Dobni, 2008). Here the functions of scientific search can be performed by both a strategic partner, i.e. a third-party research institute, and a research innovation unit that is part of the enterprise. Thus, the choice of a particular strategy is determined by external conditions, while its implementation depends on the internal organization and performance of each activity. New tasks require the establishment of a new system of relations between levels of management and between departments. For effective innovative development of the enterprise it is necessary to create a special structure that would ensure the stability of relations and reliable operation of the system as a whole.

Diffusion of innovations can take place at different stages of the life cycle of the innovation process, from the stage of fundamental research to the stage of product maturity and decline. The developed model also takes into account the increase in the degree of costs depending on the stage of the innovation process (Fagerberg et. al. 2005, who introduced such rational cost relationships in the process of creation and development of new equipment (Figure 2).

Innovative idea emergence and development				Innovative idea assimilation							Innovative idea commercialization								
Fundament al research		Applied research			R&D				Assimilation and production				Market penetration and distribution						
Ideas search and creation, marketing research Preliminary evaluation and selection of ideas	ldea definition for further development	New product concept development	Marketing strategy development	Preliminary determination of economic feasibility of product introduction	Test samples and prototypes creation	Testing	Test marketing	Sample improvement	Sample approval	Technical and technological preparation of production	Test batch output	Approved production sample output	Improved production sample output	Market penetration (test batch, mass production)	Market position stabilization	Further market conquest in a competitive struggle	Sustainable and successful product distribution	Distribution promotion through the output of product modifications	Idea, product aging Phaseout
Diffusion possibilities at all stages of the innovation process and life cycle Cost level																			
x0 x2			X ⁴					X ⁸			X16								
Product distribution volumes											· · · · · · · · · · · · · · · · · · ·				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				

FIGURE 1 MODEL OF STRATEGIC SUPPORT OF THE INNOVATION PROCESS AT THE ENTERPRISE



FIGURE 2 COST RELATIONSHIPS OF THE INNOVATION PROCESS

Strategic Research Directions

1939-6104-18-SI-1-446

These stages are idea generation and selection, concept testing, project control, and innovation commercialization. The meaning and importance of concurrent approval of decisions by marketing, R&D, production, financial departments, and enterprise management should be stressed here. First of all, this approach allows to jointly evaluating the market, scientific, technical, production and financial prospects of the new product. It is important that the information pertaining to the project is known to all (Stewart & Fenn, 2006). The production needs to know about the needs of the buyers, the finance department – on the scientific and technical developments and so on. Secondly, this method assumes: combining responsibility for its implementation, teamwork and elimination of mutual accusations in the future between the executors of the innovation project. Thirdly, joint approval of a decision on rejection of ideas proposed both at the generation and selection stages and the subsequent stages, up to commercialization. These decisions are strategic because all further activities of the enterprise depend on them (Makedon et al., 2019).

Table 1 CRITERIA MATRIX FOR EVALUATION OF THE ENTREPRISE POSITION IN THE MARKET FOR FURTHER STRATEGIC DECISION-MAKING											
The position	The stage of maturity of the industry										
of the enterprise in the market	Embryonic	Growing	Mature	Outdated							
Dominant	The pace of investment should be ahead of the pace of market development	Investments should help increase market share and strengthen market position	Investments should help maintain market position	Investments should help maintain market position							
Strong	The pace of investment is driven by the market environment	Investments are aimed at increasing the enterprise share in the market	Investments are aimed at maintaining the market position The pace of investment should be in line with the pace of market development	Investments are aimed at maintaining the market position or exiting the industry							
Favorable	Investments are aimed at increasing the enterprise share in the market	Investments are aimed at selective increasing the enterprise share in the market	Investments are aimed at stabilizing and protecting the market share	Investments are aimed at gradual exiting the industry							
Unstable	Investments are aimed at selective gaining market positions	Investments are aimed at finding a market niche and protecting it	Investments are aimed at finding a market niche and protecting it or gradual exiting the industry	Investments are aimed at gradual or abrupt exiting the industry							
Weak	Investment should either be significant, in order to create and strengthen market positions, or be aimed at exiting the industry	Investments are aimed either at restructuring or exiting the industry	Investments are aimed either at restructuring or gradual exiting the industry	Investments are aimed at exiting the industry							

The position of the enterprise may be dominant, strong, favorable, unstable, weak or unsustainable. To share these two criteria, a criterion matrix is used (Table 1).

Strategic Research Directions

Development of an innovative project is carried out on the basis of a design task or by specialists of different profiles of the enterprise, or by specialized institutions with which the enterprise conclude contracts for the development and examination of design estimates.

RECOMMENDATIONS

Recommendations for the conducted study are formed in the context of the fact that in an unstable economy enterprises absolutely need to use the mechanism of strategic management in the field of innovation projects. This will allow creating strategies, which will support the viability of the enterprise in the long run. New strategies create new tasks, which in turn require the enterprise to establish a new system of relations between management levels and between departments.

CONCLUSION

It is determined that a feature of strategic management of innovation processes in enterprises is to evaluate the performance indicators of the enterprises. For enterprises operating in an unstable economy the assessment of design innovative environmental factors seems particularly relevant. External environmental factors such as competitive situation, potential solvent customers, and reliable suppliers should be systematically analyzed. The results of the consumer demand survey directly influence the assessment of the enterprise ability to achieve the set innovation goals and to develop promising innovative projects.

REFERENCES

Ahmed, P.K. (2010). Innovation management: Context, strategies, systems, and processes.

- Anderson, J., & Markides, C. (2007). Strategic innovation at the base of the pyramid. *MIT Sloan management review*, 49(1), 83.
- Dobni, C.B. (2008). The DNA of innovation. Journal of Business Strategy, 29(2), 43-50.
- Drobyazko, S., Barwińska-Małajowicz, A., Ślusarczyk, B., Zavidna, L., & Danylovych-Kropyvnytska, M. (2019a). Innovative entrepreneurship models in the management system of enterprise competitiveness. *Journal of Entrepreneurship Education*.
- Drobyazko S., Okulich-Kazarin V., Rogovyi A., Goltvenko O., Marova S. (2019b). Factors of influence on the sustainable development in the strategy management of corporations. Academy of Strategic Management Journal. Retrieved from https://www.abacademies.org/articles/Factors-of-influence-on-the-sustainable-development-in-the-strategy-management-of-corporations-1939-6104-18-SI-1-439.pdf
- Drobyazko, S., Potyshniak, O., Radionova, N., Paranytsia, S., & Nehoda, Y. (2019c). Security of organizational changes via operational integration: ensuring methodology. *Journal of Security and Sustainability Issues*.
- Fagerberg, J., Mowery, D.C., & Nelson, R.R. (2005). The Oxford handbook of innovation. Oxford university press.
- Makedon, V.V., Valikov, V.P., & Fediora, S.S. (2019). Improving the management of industrial enterprises based on innovative development strategies.
- Prajogo, D.I. (2016). The strategic fit between innovation strategies and business environment in delivering business performance. *International Journal of Production Economics*, *171*, 241-249.
- Sammut-Bonnici, T., & Paroutis, S. (2013). Developing a dominant logic of strategic innovation. *Management Research Review*, 36(10), 924-938.
- Stewart, I., & Fenn, P. (2006). Strategy: the motivation for innovation. Construction Innovation, 6(3), 173-185.
- Tidd, J., & Bessant, J. (2014). Strategic innovation management. John Wiley & Sons.
- Chapman Wood, R. (2007). How strategic innovation really gets started. Strategy & Leadership, 35(1), 21-29.