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THE FORMATION OF STRATEGY IN THE MANAGEMENT OF THE INDUSTRIAL ENTERPRISE POTENTIAL DEVELOPMENT

ФОРМУВАННЯ СТРАТЕГІЇ В УПРАВЛІННІ РОЗВИТКОМ ПОТЕНЦІАЛУ ПІДПРИЄМСТВА

ANNOTATION

The methodical approach to the development strategy of the material and technical base of the enterprise got the further development. In contrast to existing models it is focused on formalization of strategic decision-making by methods of portfolio analysis. It is based on the logic of expanded logistics cooperation and focused on co-operative management of the enterprise business processes and its counterparties. The adoption of copyright proposals allows overcoming the contradiction between the degree of the potential disclosure of components of the material and technical base of the enterprise and ensures technological upgrade through the transfer of innovative knowledge.

Keywords: development strategy, material and technical basis of the enterprise, portfolio analysis, types of strategic decisions.

АНОТАЦІЯ

Дістав подальшого розвитку методичний підхід до розробки стратегії розвитку матеріально-технічної бази підприємства, що на відміну від існуючих орієнтований на формалізацію типових стратегічних рішень методами портфельного аналізу, базується на логіці розширеної логістичної взаємодії й зорієнтований на кооперативне управління бізнес-процесами підприємства та його контрагентів. Прийняття авторських пропозицій дозволяє подолати протиріччя між ступенем розкриття потенціалу складових матеріально-технічної бази підприємства й забезпечити технологічне оновлення через трансферт інноваційного знання.

Ключові слова: стратегія розвитку, матеріально-технічна база підприємства, портфельний аналіз, типові стратегічні рішення.

АННОТАЦИЯ

Получил дальнейшего развитие методический подход к разработке стратегии развития материально-технической базы предприятия, который в отличие от существующих ориентирован на формализацию типовых стратегических решений методами портфельного анализа, базируется на логике расширенного логистического взаимодействия и ориентирован на кооперативное управление бизнес-процессами предприятия и его контрагентов. Принятие авторских предложений позволяет преодолеть противоречие между степенью раскрытия потенциала составляющих материально-технической базы предприятия и обеспечить технологическое обновление через трансферт инновационного знания.

Ключевые слова: стратегия развития, материально-техническая база предприятия, портфельный анализ, типовые стратегические решения.

Statement of the problem. Recent trends of the national economy have considerably actualized the studies focused on overcoming the crisis associated with macroeconomic disparities as well as with numerous problems of individual entities functioning. The solution to such problems as rapid obsolescence and increase in depreciation of labour, reduction of industrial output, limited

funding for production modernization programs, high costs of goods used in production and reduction in obtained from their use value added is only possible by creating the appropriate resources and technical support.

It should be taken into account that the base to increase industrial enterprises efficiency is the promotion of resource preservation programs and reserves mobilization that improve product quality, increase susceptibility for innovations and anticipatory adaptation to technological changes, attract investment in technological innovation and optimize structures used in the resources production. Aggregation of the mentioned areas allows discussing the necessity of enterprise potential development based on the strategy of formation in the enterprise management.

Analysis of recent research and publications. Modern transformational conditions of the national economy objectively actualize the reproduction problem of available potential of national producers. Because of the potential of the enterprise has quite significant component of any business entity. Developments in the field of strategic management are acquiring particular relevance and practical importance.

The validity of this proposal lies in the sphere of D. J. Teece developments [1] (resource-based approach to strategic management is accepted), S. C. Scheiber [2] (resource availability is associated with the competitive advantages), R. J. Orsato [3] (to introduce the requirement of the resource provision sustainability for developed strategy) and H. Mintzberg [4] (general description of the enterprise strategic process).

This resource approach to strategic management, especially when accepting Teece's dynamic concept [1], requires binding enterprise policy guidelines with its business processes. The study that justifies the relevance of plane formation "process (models of purposes implementation) – context (dynamic capacities) – content (the purposes to waste resources)" is significant here and thereby it provides business processes review in terms of providing additional competitive advantages.

In terms of ensuring designated conformity of competencies and resources, the sustainability strategy should be taken into account. According to Orsato's findings [3, p. 13], it must be

understood as adherence to the chosen path of development (here it means the positioning of the enterprise in the plane "stable business model – non-stable business model").

According to the enterprise material and technical base (EMTB) this requirement is realized by ensuring conformities to enterprise existing resources consisting of objects and means of labour to support the system of core competencies and competitive advantages. Just EMTB development strategy should define a stable combination of material and technical base elements, considering sustainability while because of the possibility of levelling any impact on the competitive positioning of the enterprise. This statement is fully consistent with D. Teece's developments [1] as for resources presentation (in case of the paper topic – EMTB elements) as dynamic capabilities of the enterprise.

In the context of analysis of existing strategic management achievements and determination the possibility of their application to the processes of capacity development, let's pay attention to quite wide strategic management tools that, as it was already emphasized, can be fully moved to organize EMTB reproduction and development management.

For example, simulation modelling [2] provides dynamic view of EMTB development strategic plans and architectonics enterprise formalization [5] solves the classic problem of binding enterprise communication strategy and structure. However, we can not neglect more simple but equally effective tools such as matrix methods or modern portfolio methods (of course, here it requires the formation of own matrix system, instead of targeting such well-known developments such as BCG matrix [4]).

Speaking about the strategy of the enterprise potential development, it is impossible not to draw attention to the fact that all the achievements in strategic management in one way or another should be applied in the justification of such strategy. Thus the strategy of the enterprise potential development is proposed to consider as an operational-level functional strategy (this means that it is subject to the overall strategic development of the enterprise settings). Moreover, the adoption of the resource approach allows us to consider the strategy of the enterprise potential development as a component of strategies of the enterprise competitive positioning.

According to the enterprise material and technical base (EMTB); this requirement is implemented through ongoing compliance EMTB parameters and parameters of the system formed by the key competencies of the enterprise. Development strategy defines a sustainable combination of elements of the enterprise potential, providing stability through the levelling of any negative impact on the competitive positioning of the enterprise.

Setting objectives. The purpose of the article is to improve the theoretical and methodological

foundations to form the strategy of the enterprise potential development on the grounds of portfolio analysis technology and build managing mechanism to develop the enterprise material and technical base (MMDEMTB). In terms of the purpose of the article implementation, it is proposed to consider the enterprise potential as a set of means of labour (ML), objects of labour (OL) and used technologies (T), presented in the form of appropriate multiplicity ($\{EMTB(t)\} = \{ML(t)\} \cup \{OL(t)\} \cup \{T(t)\}$), topical at time t .

Presenting the main material. The process of EMTB development should focus on a strategic basis. It allows discussing EMTB development strategy and its inclusion as a component or external guidance to MMDEMTB. Unfortunately, some theoretical and empirical problems arise during the implementation of this statement. The theoretical problems are in terms of fairly large number of interpretation for category "strategy." Although all of them agree that the strategy reflects requirements for the enterprise movement as a socio-economic system in time, the existing differences in understanding the strategy quite differently represent the features of mechanism MMDEMTB performance.

Consequently, when strategic management of EMTB development is organized, the following features of grounding and setting strategic goals should be considered:

1) the strategic orientation of EMTB development is determined by a complex of certain values of relevant parameters. In general form they describe the desired future status (in the case of this study state $\{EMTB(t+1)\}$ or $\{EMTB(t+2)\}$);

2) the assessment of strategic prospects of EMTB development and priority directions of its transformations by various stakeholders is subjective and crucially depends on the nature of the relationship between the EMTB elements and relevant entity management, dedicated as a part of EMTB;

3) formalization of different aspirations and expectations from the enterprise is performed by building integrated consistent system of strategic goals and possible ways to achieve these goals based on a compromise between its participants. If the interests of any group of participants are ignored during determining the strategic goals of EMTB development it will result in significant reduction of incentives for the participation of this group in the enterprise, i.e. reduction of its potential in general;

4) strategic goals adopted by the enterprise must meet the following requirements – be specific and capable to determine (including – quantitatively), oriented in time, be able to achieve, consistent;

5) the complexity of the system of strategic objectives must fully comply to the diversity of existing aspirations and expectations of stakeholders. The system structure in the most cases will be hierarchical in nature, entirely consistent

with the opportunities of any group of participants who are the carriers of certain strategic expectations. It will provide meaningful impact on the enterprise management;

6) the nature and complexity of the relationships that exist between carriers of the policy expectations will directly affect the procedures for setting goals and principles of the strategic hierarchy formation. If the complex nature of relationships among its participants as for the usage of EMTB elements is ignored it will inevitably lead to conflict.

The determination of the forms and ways to achieve selected strategic goals is accomplished by developing and implementing the complex of the enterprise strategies.

There are two basic methodological approaches among the majority of existing theoretical views on the nature and definition of the category "strategy"—operational and formal. In terms of the operational approach, the strategy is a sequence of making strategic plans and programs as well as the generation of the appropriate management decisions that are necessary for the practical implementation of the defined planning documents. According to the operational approach targeting function must be included to the strategy structure. The formal approach, by contrast, is based on the concept of strategy as a planning document that defines the prior directions, forms and methods to achieve the enterprise strategic goals and has a certain degree of formalization. Thus, in terms of formal approach, the strategy, regarding to established strategic goals, has subordinated nature while the operational approach combines these concepts within the same sequence.

The operational approach is generally based on Chandler's statement [6, p. 16] that the strategy is the definition of the main long-term enterprise goals and objectives, taking a course of actions and resource allocation needed to achieve the goals. V. S. Ponomarenko [7, p. 6] also follows the broad interpretation of the concept "strategy", including targeting, description how to achieve the goals, i.e. the general program (objectives and rules for their achievement) that the enterprise has been operating for a long period.

E. Campbell [8, p. 11] insists on the expediency of the operational approach to determine the nature of the strategy because the strategy is not stable phenomenon ("once and forever preset"). It is in the process of continuous changes under transformation of the environment management. Such transformations lead to an urgent need for constant review of strategic goals. In this case they can not be displayed outside the strategy. Moreover E. Campbell believes that the process nature of the strategy provides the clear sequence of its development and implementation which consists of three phases: strategic analysis, strategic choice, strategy implementation and management. However, A. P. Gradov [9, p.132] believes that strategy is just a set of rules and

methods used to achieve the appropriate goals of the system development.

In terms of I. Ansoff [10, p.12], economic strategy is a set of rules and techniques for decision making, which the enterprise is guided in its activities and used to achieve the basic goals of the enterprise development. W. King and D. Kliland [11, p.34] believe that the strategy is a general direction where the ways to achieve the goals of the enterprise should be found. By definition S. Pokropyvnoho [12, p. 166] strategy is a general comprehensive program of actions used to define prior enterprise problems, its mission, main goals and resource allocation needed to achieve them. R. Nelson and S. Winter [13, p.72] believe that strategy is a set of essential obligations adopted by the enterprise. They define and clarify the long-term objectives of the enterprise and predictable ways to achieve these goals. According to B. Karlofa [14, p.140], strategy is a generalized model of actions needed to achieve the defined goals by coordinating and distributing the enterprise resources.

When the researchers study the strategic planning they do not pay enough attention to the structure and mutual dependence of the enterprise strategies. This view seems to be based on the assumption that subordinate nature of strategies as to the enterprise strategic goals i.e. a large number and variety of possible priorities and targets must lead to purely situational formation of the enterprise strategic portfolio (targeting set of strategies offered for implementation). Mainly this statement is also based on a large number and diversity of strategies and even features of their classification.

However, it should be argued that on the whole the lack of appropriate logic and systematic approach to form the system of strategies is contrary to the nature and principles of planning. The strategy of potential development refers to the variable level of strategies because it is subordinated to the requirement of transforming areas of the enterprise competence (this requirement is specified and formalized within several strategy signs at the normative level, their development is compulsory for any entity). Moreover, the strategy of EMTB (DS_{MTB}) is not defined in the time sequence of actions and generalized representation of the approaches and principles used as a base to reach compliance of elements of the enterprise potential to the zones of the enterprise competence. So the strategy of EMTB (DS_{MTB}) development management goes into the management mechanism (MMD_{EMTB}) indirectly through the enterprise goals (G_E).

The defined correlation of the normative and variable strategies represents different understanding and correlation of the concepts of "enterprise potential development" and "enterprise material and technical basis development".

EMTB development can be considered in two aspects (both are related to the variable part):

1) as EMTB adaptation to the conditions of switching to the new area of competence (an

extensive and reactive component of the development; in relation to business processes it can be understood as "pulling" system when business processes and their implementation adapt to the new requirements of the competitive market);

2) as the creation of conditions to switch to the new area of competence (an intensive or anticipatory strategy; in relation to the processes it is understood as "pushing" system where EMTB transformation leads to market new competitive advantages).

An integrated system of rules, methods, principles, patterns and resulting positions is understood as adjusters in the context of the strategy according to H. Mintzberg's [4] 5P concept realizes.

Thus, we should to focus on principles as for introducing criteria of sustainability, innovation, adaptability and reliability of the development processes when EMTB strategy of development is being built up. This principle can be understood in

different way as empowering EMTB development processes with properties of stability and adaptability as a result of effect of the management mechanism (MMDEMTB). Thus, these properties must be shown under properties of non-linearity processes of development. They are the plurality of states which the system can switch after implementation. The corresponding generalizations are presented in table 1.

Speaking about the innovative feature of the EMTB development we should also discuss some theoretical explanations. In the author's opinion, the market (competition) concept is the most efficient among the existing concepts of innovation and commercialization. It is based on the prior role of innovation in promoting the implementation of the enterprise market opportunities and achieves competitive advantages. S. M. Ilyashenko [15, p. 18] points out that innovation is the end result of the activity to create and usage

Table 1

**The consideration of the enterprise material and technical base development
as part of the strategy (S_{MTD})**

The indicator (quality criteria of the potential development)	Description of criteria:	
	Stability, adaptability and reliability	innovation and nonlinearity
Strategy aspect SD_{MTB} in the part of means of labour $\{ML(t+1)\}$		
The quality of the used equipment and technological conditions	The requirement to comply parameters of material and technical support at the beginning of the new state of EMTB	The formation of new element $\{ML(t+1)\}$ by increasing the share of innovative types of means of labour
The opportunities to optimize costs and intensity of element usage	Increasing the intensity of the certain mean of labour must correspond to the appropriate level of reliability of the element	The growing share of innovation costs. The growing share of costs to buy new equipment and R & D results
Age of the park equipment and the level physical and moral wearing out	The conceptual revision of the park equipment to comply new elements and those remaining after usage	Increasing ratios of the equipment recovery and providing updated equipment and machinery to the divisions
Strategy aspect SD_{MTB} in the part of objects of labour $\{OL(t+1)\}$		
Creating competitive advantages and their presence in the areas of resources	Switching to $\{OL(t+1)\}$ has to take into account the volume of strategic areas of resources and the requirement not to detente the competitive advantages	Attracting new kinds of resources resulting from the modification of current regulations interaction with the areas of relevant resources
The quality and technical level of resource support	The requirement to meet the needs of organizational and technological conditions at the beginning of the new state EMTB	The level of prosecuted and own resources usage to perform innovative tasks must correspond to high technological standards
Compliance with the production program and the complementarities of the processes	The resource base updating has to improve consistency of outputs of one process with inputs from other process	Oriented resource strategies and systems of logistics for permanent improvement implementation
Strategy aspect SD_{MTB} in the part of technologies $\{T(t+1)\}$ and business processes $\{BP(t+1)\}$		
The duration of the product development cycle and technical level of production	Attracting financial resources to implement innovative tasks should not endanger the functioning	The growing share of products improved during the last three years in total commercial products turnover
The distribution of narrow places by levels of architectural representation	The primary adherence to compliance of parameters of technical process to innovate challenges and sustainability of organizational structure of MMDEMTB	The level of equipment of divisions with technological equipment, appliances, office equipment
Positioning in the plane of traditional / innovaive technologies	Switching to the new organizational and technological conditions should be consistent with the parameters of tools and objects of labour	Formation of $\{T(t+1)\}$ through (increasing the share) completely new or significantly improved technological processes

of innovations embodied in the form of improved or new products (goods or services), production technologies, management practices at all stages of production and marketing of products that contribute to the development and improvement of the enterprises that use them.

The main purpose of innovation, as for S. M. Illyashenko's opinion [15, p. 56], is the realization of the certain market opportunities, the areas of the enterprise activities, are opened depending on external conditions and the specifics of its business activity. N. V. Popovenko and E. A. Zabarna [16, p. 59] also argue that innovation is a combination of technical, industrial and commercial activities resulted to appear new and improved industrial processes and equipment on the market. In terms of M. Crozier [17, p. 395], even the nature of modern competition involves the competition for the ability to implement innovations (in contradistinction to the desire to possess material goods and resources at the pre-industrial and primary industrial stages of production).

The theoretical groundings proposed in the article can get the practical usage. So the author of this publication proposes to introduce a number of conditions. Firstly, it is proposed to allocate a number of areas that can be used to develop alternative strategic decisions. Together these areas form the strategy profile (elements of the strategic profile are formalized in the form of multiplicity {SP}). As part of this profile the following issues are going to be discussed: financing the main assets renewal (SP_1), defining the environmental and capital-labour ratio (SP_2), the positioning in the continuum "traditional – innovative" technologies (SP_3), regulating the characteristics of business processes (SP_4), organizing the reproduction of the material base (SP_5), involving resources

to create competitive advantages (SP_6) etc. Secondly, it is suggested to base the informative content and the definition of alternative options for the components of the multiplicity {SP} on creating the matrix of portfolio analysis. The proposed version of this matrix is shown in figure 1.

The basis of the proposed matrix (figure 1) is the idea that the development of the enterprise material and technical base should be based on the evaluation of the level of innovative potential of the enterprise and level of susceptibility of the enterprise to implement innovations. This ratio allows not only describing the strategy of EMTB development but also takes into account the need to move between S-curves of technology development.

The specified profile (fig. 1) to the strategy of EMTB development involves the formation of the corresponding strategic profile. There are two principle points here. Firstly, every profile element corresponds to the profile list of typical strategic decisions.

The corresponding presentation of the profile of development strategy of the enterprise is presented in the table. 2. Secondly, the profile elements are also formed in the context of outlined above and proposed by the author matrix of portfolio analysis. In terms of specification some elements defined in tab. 2 profile SP_{MTB} let's pay attention that as SP_{MTB} activity so the result of MMDEMTB activity provide in their results organizing properly functioning system of the enterprises logistics.

Thus, the selection of the profile elements of SP_{MTB} in tab. 2 is made in a way that they describe individual functional strategies of the enterprise such as: resource strategy of the enterprise that is understood as part of the strategy of EMTB development in terms of switching to $\{OL(t+1)\}$ and oper-

The innovative potential of the enterprise	High	SP_1 – non dramatic modernization of the current park of the means of labour SP_2 – non dramatic modernization of used objects of labour SP_3 – an activity to implement supportive innovations SP_4 – an activity to build adaptive capacity SP_5 – escalating the level of receptivity to innovation SP_6 – resources that provide the basic advantages in the market	SP_1 – focusing on self-developed innovations SP_2 – supporting the current level of environmental technologies SP_3 – the predominant focus on the innovations SP_4 – supporting the current mode of the enterprise activity SP_5 – reproduction through own innovations SP_6 – achieving leadership through the complexity of copying
	Low	SP_1 – analogue on the level of supporting competences SP_2 – dramatic changes in increasing means of labour SP_3 – switching to any other segment of the matrix SP_4 – dramatic transformations in the activity parameters SP_5 – orientation on the prevailing quantitative growth SP_6 – prevailing quantitative growth	SP_1 – raising funds for more dramatic innovations SP_2 – transformation of equipment and technology parameters SP_3 – traditional technologies of potential development SP_4 – re-engineering and outsourcing of business process SP_5 – increasing potential to implement changes SP_6 – focusing on the transformation of technology parameters
	Low	High	The susceptibility of the enterprise to innovations

Fig. 1. Profile of grounding the strategy of development of the material and technical base of the industrial enterprises

Table 2

The profile of strategy of the EMTB development

The element of profile of (the typical strategic decision)	Options to disclose the strategic decisions in context of proposed matrix of portfolio analysis			
	ISP – low IPU – low	ISP – high IPU – low	ISP – low ISP – high	IPU – high IPU – high
Funding in the renewal of the means of labour	Attracting analogue on the level of supporting competences	Fundraising for more dramatic innovations	Non dramatic modernization of the current park of the means of labour	Focusing on self-developed innovations
Determining the level of environment and fund-sufficiency	Fundamental changes in the direction of increasing the volumes {ML}	The transformation of equipment parameters and technologies	Non dramatic modernization of the current park of the means of labour	Supporting the current level of environment and level of funds
Regulating the operational characteristics of business processes	Fundamental changes of parameters of the enterprise activity	Re-engineering and outsourcing of business process	The activity to increase adaptive capacity	Supporting the current mode of the enterprise activity
Organizing the reproduction of material and technical base	Orientation on the prevailing quantitative growth	Increasing potential to implement changes	Increasing the level of susceptibility of innovation	Reproduction through own innovations
Involving resources to create competitive advantages	Orientation on the prevailing quantitative growth	Orientation on switching the parameters of technology	Resources provide the basic benefits to the market	Achieving leadership through the complexity of copying

ation in new conditions which are defined by the parameters of the objects of labour; logistics strategy of the enterprise that determines the features of movement of the objects of labour in the enterprise and during the delivery to the enterprise; the strategy of technical upgrading, as the part of SPMTB that defines the parameters of switching to $\{ML(t+1)\}$ and creating new organizational and technological conditions $\{T(t+1)\}$ for a new set of the means of labour; transformational strategy that justifies the principles and approaches to transformational parameters as EMTB so the appropriate strategies to these parameters.

Conclusions. Thus, it is proved the article that the existing achievements in the field of global strategic management should be taken into account when developing the enterprise potential development strategy. The main proposal is to subordinate the EMTB development to the requirement of transforming areas of the enterprise competence and to bring it together to generalized representation of the approaches and principles used as a base to reach compliance of elements of the EMTB to the zones of the enterprise competence. Directly EMTB development is proposed to consider in two aspects: as EMTB adaptation to the conditions of switching to the new area of competence or as the creation of conditions to switch to the new area of competence. However, it requires conducting the further research to build up components for matrix portfolio analysis that reflects the individual components of the EMTB development strategy.

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