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Eurointegration, marketing communication and virtual logistic in Ukrainian and Polish enterprises¹

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Abstract

In contemporary virtualised and globalised economy, the use of synergies in industrial resource management is of particular importance. Taking into account the revealed features and trends of marketing interaction of the companies in Ukraine and Poland it is important to utilise determinants in the virtual sphere. The author offers the methodical approach to assessment of the capital and quality of production of the enterprise, based on analysis of elements of quality. The methods of performing the dynamic analysis of the movement of enterprise capital's elements are worked out. Synergy as a generalising and targeting movement of economic processes is an important scientific tool in e-economics. It is necessary to consider the mechanism for building network structures for managing financial and marketing activities, to evaluate the effectiveness of financing and investing capital in the main and working assets of production units of the enterprise that contribute to international electronic commerce and business. The use of modern marketing communication and logistic technologies in the world for improvement of psychological perception, as well as economic and social support for the maximum use of renewable energy resources is significant. At the same time the leading innovative technologies of energy saving, which are based on generation of alternative energy sources in a complex, must be taken into account. **Keywords:** Eurointegration, Poland, Ukraine, financing, marketing communication, virtual logistic

Integracja europejska, komunikacja marketingowa i logistyka wirtualna w przedsiębiorstwach ukraińskich i polskich

Streszczenie

W teraźniejszej zglobalizowanej gospodarce, synergia w zarządzaniu zasobami przemysłowymi ma bardzo ważne znaczenie. Uwzględniając właściwości i tendencje marketingu i współdziałania firm

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w Ukrainie i Polsce należy skutecznie wykorzystywać determinanty w zakresie wirtualnej logistyki. Autor artykułu proponuje podejście metodologiczne do oceny kapitału i jakości produkcji przedsiębiorstwa, które bazuje na analizie elementów jakości. W niniejszym tekście zostaną zaprezentowane metody wykonania dynamicznej analizy przeptywu elementów kapitału przedsiębiorstwa. Synergia w procesach ekonomicznych jest ważnym naukowym instrumentem w gospodarce cyfrowej (ang. *e-economics*). Należy rozpatrywać mechanizm kształtowania struktury sieci dla zarządzania działaniami finansowymi i marketingowymi, żeby ocenić skuteczność finansowania i inwestowania kapitału w aktywa wytwórcze poszczególnych jednostek przedsiębiorstwa. Sprzyja to rozwojowi międzynarodowego e-handlu i prowadzeniu działalności biznesowej. Wdrożenie współczesnej komunikacji marketingowej i technologii logistycznych dla doskonalenia psychologicznego odbioru oraz ekonomicznego i społecznego wsparcia maksymalnego wykorzystania zasobów energii odnawialnej jest bardzo istotne. Należy uwzględniać innowacyjne technologie oszczędzania energii, które bazują na generowaniu źródeł energii alternatywnej w kompleksie. **Stowa kluczowe:** integracja europejska, Polska, Ukraina, finansowanie, komunikacja marketingowa, logistyka wirtualna, gospodarka cyfrowa.

It is important to develop wind power, using the systematic increasing logistics service, and to support the construction of solar power stations in Poland and Ukraine, using the leading innovative technologies of energy saving (Dziuba, Kasian 2020: p. 487). It is expedient to begin the international cooperation between Poland and Ukraine in the sphere of logistic energy saving at the international fairs and exhibitions. "The modern innovative changes happening in the inter-industry and cross-disciplinary areas allow to count on a constant global trend to increase in incomes of 4PL and 5PL virtual logistic operators" (Kasian, Szostek 2020: p. 83–84). Such trend, undoubtedly, will have regional specifics and fluctuate in rather wide limits over the countries and regions of the world.

"In the modern virtualized and globalized economy the use of synergy effects at resource management of the industrial enterprise is very importance. The synergy as the scientific tool generalizing and aiming the movement of economic processes is important in e-economy. It is necessary to investigate the mechanism of network structures creation of financial, marketing activity management. In modern conditions the efficiency of financing and investment of capital in fixed and current assets of the enterprise production divisions promoting the international electronic trading and business is estimated." (Dziuba, Kasian 2020: p. 487). The impact of competition in global markets, network effects, and synergy effects on enterprise resource management is significant.

P. Kotler noted: "Yet many companies view service as [...] a cost, as something to minimize. Companies rarely make it easy for customers to make inquiries, submit suggestions, or lodge complaints. They see providing service as a duty and an overhead, not as an opportunity and a marketing tool" (Kotler 2003: p. 168).

In our opinion, now it is necessary to actively develop a high-tech service based on the systematic introduction of innovative energy-saving technologies based on alternative energy sources. In this regard, enterprises have to adhere to the concept of high-tech marketing.

The article's aim and research methods

The basic aim of this article is investigation of modern condition of industrial organisation's production process and development of recommendations to regulate risks through diversification and maximisation of enterprise's profit. The following research methods are used in the article: generalisation, abstraction, classification, systematisation, system approach, analysis, comparison, methods of expert assessment. A technique for describing the features of the marketing interaction of enterprises and their determinants in the virtual sphere is also used. A methodical approach to the assessment of capital and the quality of the enterprise's production, based on the analysis of quality elements, is proposed.

Results

During the international integration of education, science and business, the optimum logistic strategy of the enterprises in the European markets was formed thanks to the synergy of efforts of experts, market and social agents, and enthusiasts. Specification of the methodological principles of the international marketing in branches of alternative power engineering, medical technologies, robotics and electronic engineers is very important. Modern logistics outsourcing platforms provide effective interaction with the interested agents and widely use elements of the international e-logistics and logistics service. The institutional and innovative directions of integration processes are allocated in the system of effectively constructed enterprise's international logistic strategy. It has the implementation during the marketing interaction of economic agents of Poland and Ukraine in the EU's united innovative space. It is necessary to analyse features of conducting market research and processing primary and secondary marketing information, when determining the extent of the competition in the market, barriers of the entrance and exits (Dziuba, Kasian 2020: p. 487).

Scientists suggest that the main task of strategic marketing in positioning in the market is to analyse the competitive state of the enterprise in the market and the direction of its strategic development. An important aspect of marketing is also customer relationship management. To achieve sustainable competitive advantage in the market, high-tech enterprises must invest in building long-term customer relations. Therefore, to improve marketing effectiveness, we recommend to utilise CRM (Customer Relationship Management). The use of the marketing audit makes it possible to increase the communication efficiency of the participation of innovative energy enterprises in world exhibitions of energy equipment, discussions on the implementation of the latest resource distribution technologies in energy networks. The participation of energy enterprises in exhibitions of both high-tech equipment and computer equipment and software contributes to the establishment of effective marketing interaction.

In our opinion, compliance with the basic rules of economical production of the enterprise allows to create high-quality and high-tech products. The system is directed to

systematic saving of main types of resources with appropriate informational support. The products created in such way have innovative character, and thanks to the good marketing communication and logistic providing, have to be implemented quickly in the target markets. Clients, at appropriate level of technical and logistics virtual service, provide positive responses and get pleasure from the use of the company's production.

Special approach to the international virtual logistic providing in business interaction of market agents of Poland and Ukraine has to be concerned with the use of alternative energy sources flows. These flows are generated and distributed at the consumption of biogas, wooden sawdust, industrial and household garbage, collateral heat of housekeeping subjects (Kasian 2016). At the same time it is necessary to care systemically for application of high-tech thermal insulation in energy networks (Dziuba, Kasian 2020: p. 488).

Taking into account the revealed features and trends of marketing interaction of the companies in Ukraine and Poland it is expedient to characterise these features and determinants in the virtual sphere (see *Table 1*).

Table 1. Eurointegration marketing communication, interaction determinants in the virtual logistic enterprises in Ukraine and Poland

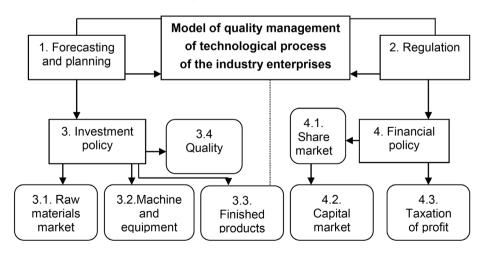
Nr	Eurointegration marketing communication, Interaction determinants of the virtual logistic enterprises in Ukraine and Poland	Characteristic of the chosen communication and logistic determinants	Visualisation of deter- minants in interactive marketing virtual space of Ukraine and Poland
1	Modern logistics outsourcing platforms	Outsourcing platforms allow to organise communications in an expedited manner and effectively	The software and information products serving marketing interaction
2	Integration of the international e-logistics and logistics service	Synergetic quality of service, providing effective marketing interaction	Functioning of the virtual logistic centers and virtual offices in the analysed countries
3	On-line organisation of payment operations	Financial legal support of the payment organisation opera- tions on the Internet	The interface and com- munication service during the organisation of payment operations
4	The accelerated positioning in the international markets	The components of the marketing complex of positioning displaying cultural and innovative characteris- tics of the countries	The concrete manifestation in the form of elements of the enterprise marketing complex the displaying marketing positioning

5	Consulting ensuring transfer of communication messages, good language	Continuous explana- tion of the interna- tional logistics service features	Contextual advertising in the system of digital marketing in Ukrainian and Polish languages
6	Technical and logistics virtual service	Quality remote maintenance of the international logistics service	Concrete procedures and basic mechanisms of virtual logistics service
7	Goods category within free market and logistic regulators of the EU	Classification of goods in the context of optimisation of their moving to the EU	Differentiation of logistic strategy and tactics of the EU in borders of the commodity range

Source: author's elaboration on a basis: Koev 2017; Borkowski 2017; Krykavskyy 2005; Zozulyov 2005.

We offer the methodical approach to the assessment of the capital and quality of production of enterprise, based on analysis of elements of quality. The methods of performing the dynamic analysis of the movement of enterprise capital's elements are worked out. Within this research there were carried out an analysis of forming processes of capital structure dynamic characteristics, as well as analysis of modern approaches towards financing characteristics management. There was created a conceptual scheme of the model of quality management of technological process in the industry enterprises (Dziuba, Kasian 2020: p. 488).

Figure 1. The conceptual scheme of the model of quality management of technological process of the industrial enterprises.



Source: author's own elaboration.

Some approaches to the management of basic and turnover capital of the industry enterprises have been reviewed. In the model (see: *Figure 1*) theoretical and methodological bases of creation of the marketing and economic mechanism of establishment of conditions of deliveries and selling. The mathematics model of optimal policy of the management of buying and selling in accordance with production quality are presented. There was also carried out a simulation of different ways of forming capital structure during the realisation of different strategies of financial management (Helfert 1991; Keller 1998). We offer on the basis of studying the existing approaches, the system approach to enterprise basic and current capital management under the circumstances of the scantiness of resources.

"The model consists of four directions: investment of the capital, the politician of financing, the marketing, quality and ecological policy, each of which contains three levels: economical, regional and operational; such structurization of the modelling scheme leads to breakdown of investigated set of processes on 12 blocks. The basic idea of a submodel of investment policy is the choice of the most meaning elements of industrial stocks, studying and the analysis on the selected works a kind of material resources of the corresponding market with the purpose of definition on it of a level of a competition. Depending on which in the raw market and values forecasting parameters of conditions of the offer of a resource the economic substantiation of the conclusion of optimum conditions of supply with suppliers is developed" (Dziuba, Kasian 2020: p. 488; see also: Mruk 1999; Petty et al. 1994).

"Synergy as a generalizing and targeting movement of economic processes is an important scientific tool in e-economics." (Kasian, Szostek 2020: p. 84). It is necessary to consider the mechanism for building network structures for managing financial and marketing activities, to evaluate the effectiveness of financing and investing capital in the main and working assets of production units of the enterprise that contribute to international electronic commerce and business. A separate stage analyses the characteristics of conducting marketing research, processing of primary and secondary marketing information in determining the degree of competition in the market, barriers to entry and exit from the market. The competitive potential of the industry is determined based on the integrated use of the matrices of the competitive state of the economic processes of the industrial enterprise.

Conclusions

The use of modern marketing communication and logistic technologies for improvement of economic support of the maximum utilising of renewable energy resources is significant. "At the same time the leading innovative technologies of energy saving, which are based on generation of alternative energy sources in a complex take. It is expedient to apply innovative technologies of logistic recycling, to carry out sorting of garbage." (Dziuba, Kasian 2020: p. 488–489). This occurs to depreciation of financing, minimisation of operational and financial risks, increase in productivity of

generating have arrived the basic and turnaround actives. Introduction of the offered model assists improvement of the financial condition and increases market stability of subjects of industrial business. Thus, the efficiency of the use of the capital at the enterprises raises: the reference of means is accelerated, the volume and speed of realisation increase.

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58

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