UDC 339.18:001.895:338.28 **JEL Classification: G31, M31, O31, C61, D81**

Sokolova Lyudmyla Vasylivna,
Doctor of Economics, Professor, Professor of the Department of Economic Cybernetics and Management of Economic Security, Kharkiv National University of Radio and Electronics (Kharkiv, Ukraine);
Veriasova Ganna Mykolaivna,
Senior Lecturer of the Department of Economic Cybernetics and Management of Economic Security, Kharkiv National University of Radio and Electronics (Kharkiv, Ukraine);
Sokolov Oleg Yevgeniyovych,
Doctoral Candidate of the Department of Economic Cybernetics and Management of Economic Security, Kharkiv National University of Radio and Electronics (Kharkiv, Ukraine); Head of the Donetsk Regional Administration of "UKRSIBBANK" BNP Paribas Group (Donetsk, Ukraine)

TO THE QUESTION OF EFFECTIVE MARKETING INNOVATION AND INVESTMENT PROJECTS CHOICE IN THE ENGINEERING INDUSTRY

In the article the actuality of marketing of innovations problem investigation as a means of engineering enterprises competitiveness increase is substantiated. The analysis of existing scientific and methodical approaches to the estimation of marketing innovative and investment projects in the industrial goods production sphere was made. The methodology of optimal variant project choice considering the influence of investment risks and inflation was proposed.

Keywords: innovations, investments, marketing, project, effectiveness, model, enterprise.

Statement of the problem. Under conditions of a market economy production and economic, commercial and social activities of the commodity-producers enterprises succeed only in innovations implementation. Concerning this, special attention should be paid to the innovation process, without which it is impossible to achieve significant progress in the economic development of the industrial enterprises.

Today top-managers of enterprises are considering the concept of innovation development management through the prism of marketing, as marketing namely plays a special role in the process of enterprise management. It is shown up both in the creation of market opportunities for enterprise and their effective use in accordance with the existing innovative potential, and in the implementation of enterprise management using complex tactical marketing tools. The recognition of this fact allows to consider marketing of innovations as a factor of industry enterprises development and as a mean to ensure their competitiveness in the long term [1; 2]. However, without the formation and implementation of an effective innovation policy maintaining of a high level of industrial enterprises competitiveness is impossible.

As a result of innovative activity high-tech product is competitive, which strengthens the market position of commodity-producer enterprise. In the process of innovative development of an enterprise creation and use of new technologies occupies an important place. These technologies are a main key factor in improving the competitiveness of enterprises in the markets [3].

For the first response to rapid changes in the business environment, market needs and maximum use of market opportunities engineering enterprises requires constant work in

innovative field of activity including relations with the environment.

The key to a successful solution of these increasingly complex problems is an innovative marketing activity, which becomes the center of corporate strategies in the modern conditions. Constant changes in the business environment create a fertile ground for innovation, because new opportunities appear to satisfy both new and existing customer needs [1; 2; 4; 5].

According to the special literature analysis under the problem of marketing innovation it was found that the main features of marketing innovative activity of engineering enterprises are the following: focus on the achievement of the final practical business-result of innovation; seizure of a certain market share in accordance with the long term goal of the innovation project; the integration of research, production and marketing activity, the practical implementation of which is possible in the system of the enterprise management; focus on the long term perspective, that requires close attention to the forecasting researches, to the development of innovation on their basis, that provides high-performance economical activity, to the use of interrelated and mutually agreed strategy and tactics of active adaptation to the needs of potential consumers with simultaneous targeting influence on theirs interests.

Under the marketing innovations it is necessary to understand new embodied or significantly improved marketing methods that cover considerable changes in the design and packaging of products, the use of new methods of sales and presentation of products (services), their presentation and promotion to the markets, the formation of new pricing strategies. Marketing innovations are aimed when meet the needs of consumers, expanding their inventory and qualitative composition, the opening of new markets in order to increase sales and ensure the effectiveness of marketing activities of industrial enterprises in a unstable business-environment [6].

Thus, the need to implement the marketing approach to innovative development of commodity-producers enterprises is associated with those changes of the business environment, which causes the appearance of new possibilities to meet the needs of existing or new needs of consumers in the market.

Analysis of recent research and publications. Activation of innovative activity in engineering enterprises on the base of marketing requires the implementation of innovative projects. It should be noted that all the innovation projects are investment one, because without investment the project implementation is impossible. That's why, the author term "Marketing Innovative and Investment Project" was introduced, under which, from our point of view, it can be understood any complex of innovative marketing actions secured by investments.

Effectiveness of marketing innovative and investment project is estimated from different points of view. Based on the marketing innovation features efficiency can be regarded as technical, technological, environmental, social, organizational one. An important component of the process of marketing innovative projects implementation into the engineering enterprises activities is the evaluation of economic efficiency. Therefore, the choice of adequate methods and appropriate mathematical models of that assessment becomes actual.

Theoretical and practical aspects of innovation and investment projects of economic effectiveness estimation are studied in the works of foreign and domestic scholars: Akhmetzianov I.R. [7], Behrens W. [8], Garkavenko S.S. [1], Zhovkovska T. [2], Illiashenko S.M. [6], Kovalev V.V. [9], Koiuda V.O. [3], Koiuda P.M. [10], Kramskoi D.Y. [11], Kuzmenko V. [12], Notovskyi P.V. [13], Tielietov O.S. [14], Hawranek P.M. [8], Sheiko I.A. [15], Yakovlev A.I. [16], Yastremska O.M. [17] et al.

The literature analysis on the problem of the study allowed to state as it is known that we

can distinguish two groups of indicators used to estimate the cost-effectiveness of projects. So, for indicators based on discounted estimates ("dynamic" methods), as it is known, we can refer such as: net present value *NPV*; profitability index *PI*; internal rate of return *IRR*; modified internal rate of return *MIRR*; discounted payback period *DPP*. Indicators based on accounting estimates ("static" methods) are these ones: the payback period of investment *PP*; accounted rate of return *ARR*.

It was found that the majority of scientists for assessing of the cost-efficiency of projects often suggest the use of the method of net present value that is fully justified [7; 10; 11; 13; 15; 19]. Note, however, that the marketing innovative and investment project is characterized by specific features associated primarily with the influence on the success of the innovation implematation on the market of the set of internal and external environment destabilizing factors (e.g., the general trend of reducing the product life cycle on the market, strengthening of legislation concerning to environment protection, brand capital increase, the low skill level of marketers etc.).

Unsolved issues as a part of the problem. In the context of the country's crisis, economic and political instability of the investment opportunities of engineering enterprises decreased. The problem is connected first of all with a decrease in the budget opportunities as of enterprises by themselves as the whole country. It requires a substantiate choice of the optimal variant of innovative and investment projects in the field of marketing.

The aim of the article is the substantiation and development of appropriate methodical tools of optimum marketing innovative and investment projects choice on the basis of the application of methods and models for estimation of their effectiveness, taking into account inflation and risk factors influence.

This stipulates the necessity of an analysis of existing methodical approaches to the cost-effectiveness of real projects estimation and assessment of their applicability to the problem solution, since the effective implementation of marketing innovative and investment projects requires the use of adequate models and methodical tools [10].

The main material of the study. In the context of the considering problem the methodical approach proposed by scientist Kuzmenko V. can be allocated. This work [12] recommends to use the comprehensive quantitative evaluation model that takes into account the factors of success in the process of new products creation. The model is based on the analysis of key factors that influence on the product innovation implementation process and the level of values determination, which is formed in the enterprise for each success factor of innovation implementation [5, p. 47].

The author's vision of the solving problem direction lies in the fact that, taking as a basis the above approach, to one should develop its scientific and methodical basis at the expense of the following propositions implementation:

– under the formation of the sought-for mathematical model, the method of net present value corrected by inflation, risk and conditions of projects alternativeness (meaning the possibility of differences in the periodicity of their implementation) must be used;

– to apply the expert method to the choice of key success factors set and assessment of theirs significance with the specificity of each concrete enterprise production;

– to synthesize a mathematical model for calculating of the complex index of the effectiveness of marketing innovative and investment projects estimation;

– to specify the selection criteria for the optimal variant of the project on the basis of the complex index of efficiency ranking.

Information uncertainty is one of the problems of the effectiveness of innovative and

investment projects estimation that served as substantiation of expediency of this approach development and application. This information uncertainty arises because of the three cash flows accompanying the project, namely, investment costs, operating payments and cash receipts, only investment costs can be clearly accounted for. Consequently, there is always the risk of the project that is recognized effective one on a stage of the examination and can be unprofitable at the stage of its implementation. It is due to the fact that the achieving of real indicators through the project implementation can be deviated from planning of indicators because of sudden changes in market conditions and/or the impact of any unaccounted factor in the evaluation of the project.

Thus, the inclusion of risk is very important for marketing innovative and investment projects indicators calculation. That is why, the use of the methodical approach was proposed. The essence of this approach consists in the correction of initial cash flow on the reducing coefficient that characterizes probability of income acquisition in a planning time period under the recommendations [9, p. 283].

For inflation inclusion it is expediently to apply the correction of all factors influencing on cash flows of compared projects with the following recalculation of the net present value coefficient. It is quite appropriate to the use of less labor-intensive approach that provides correction of the discount coefficient by inflation index [9, p. 280]. Furthermore, in order to select the best real project from several nonalternative projects according to [9, p. 279] it is expedient to use the methodic under which the net present value coefficient is calculated by the formula of infinitely decreasing geometric progression.

The mathematical model of the optimal marketing innovative and investment projects choice from the certain limited set of real alternative projects by the "max" criterion of complex index indicator of effectiveness can be represented as follows:

$$CIMP_j = \left(\sum_{k=1}^{t} \frac{P_{kj} \cdot p_{kj}}{(1+r+i_k)^k} - \sum_{z=1}^{m} \frac{IC_{zj}}{(1+i_z)^z}\right) \cdot \sum_{s=1}^{d} (a_{sj} \cdot k_{sj}) \to \max, \quad (1)$$

where $CIMP_j$ – complex index indicator of marketing innovative and investment project j effectiveness, $j = \overline{(1,q)}$; q – quantity of compared alternative projects; P_{kj} – element of forecasting cash flow of project j in the implementation year k, $k = \overline{(1,t)}$; t – implementation period of project j; p_{kj} – probability of income receipt of project j in the implementation year k; r – discount coefficient; i_k – forecasting level of inflation in the year k; IC_{zj} – volume of financial recourses investments in the implementation year z of project j, $z = \overline{(1,m)}$; i_z – forecasting average annual level of inflation in the year z; m– period of financial resources investments under the project j implementation; a_{sj} – averaged expert judgment by success factor s of project j implementation; $s = \overline{(1,d)}$; d – quantity of success factor of project j implementation; k_{sj} – significance coefficient of success factor s by project j, $s = \overline{(1,d)}$.

In accordance with the assigned aim on Figure 1 is shown the extended scheme of estimating of the effectiveness of marketing innovation and investment projects (MIIP).

Main stages of the scheme solution of the sought-for problem are presented with 8 basic blocks. Let's consider briefly the essence of each block of the given author's scheme.

Block 1. Decision making by enterprise management about the choice of optimal marketing innovative and investment project with the purpose of its implementation in future is going on in accordance with the business plan.

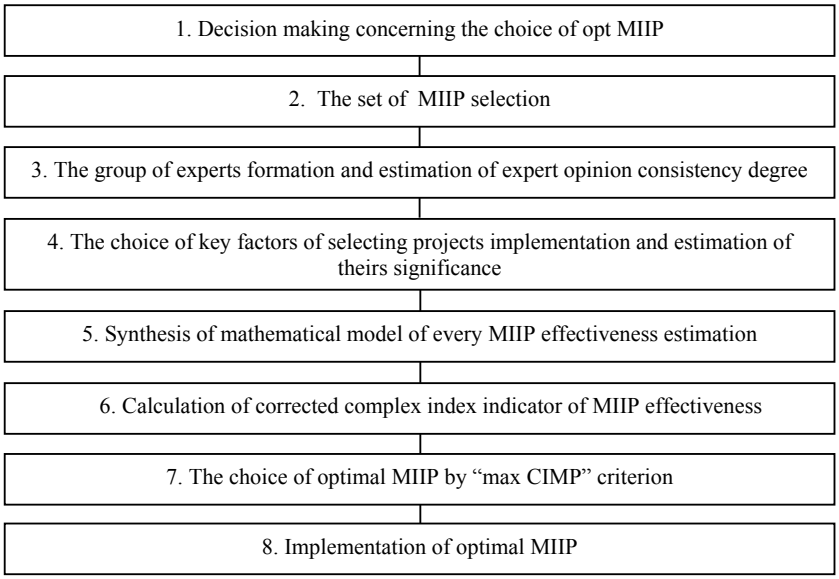

Figure 1 **– Extended scheme of estimation of Marketing Innovative and Investment Projects Effectiveness,** (author's approach)

Block 2. The choice of certain set of alternative, real marketing innovative and investment projects for possible their implementation is the decision of enterprise management.

Block 3. The group of experts formation is based on the leading specialists of the enterprise: head of marketing department, head of planning and economic department, head of production department. Further evaluation procedure is carried out of expert opinion consistency degree estimation based on the results of calculation and analysis of specific indicator W – concordance coefficient. Calculative value of concordance coefficient must satisfy the condition $W_p > 0,5$, otherwise it is necessary to revise membership of expert group. Factual value of concordance coefficient in the work is acceptable.

Block 4. Expert judgment of key success factors of three marketing innovative and investment projects carried out under the chosen in this case 10-point scale. Average expert judgment more than 0,85 was taken as a criterion for the selection of the key success factors for each project. Thus for each project 7 key success factors from 14 considered ones were selected. Than coefficients of significance for each key success factor under the each project were calculated. Average expert judgment by each factor is calculated as arithmetical mean of expert judgments given by each expert under the chosen system of score scale. So the significance coefficient of each estimated success factor is proposed to estimate as its weighted average value that is measured in relative units.

Block 5. For solving of the sought-for problem it is necessary to synthesize the mathematical model of complex index indicator calculation for evaluating the effectiveness of marketing innovative and investment projects.

Block 6. Procedure of correction lies in recalculation of net present value under the condition of risk and inflation factors, success factor of each project implementation of significance inclusion.

Block 7. The choice of optimal real marketing innovative and investment project by criterion of maximum of complex index indicator of effectiveness – "max CIMP" is done.

After receiving of the calculated values of evaluative indicator-criterion for each project the choice of optimal real marketing innovative and investment projects is going on.

Block 8. The scheme is completed with the stage of implementation of the selected optimal project in the sphere of practical innovation, investment and marketing activity of the engineering enterprise. The results of appropriate calculations for three considered MIIP were received and are given in the Table 1.

Table 1 – **The results of calculation by projects,** (author's calculated)

Indicator	Calculation results		
	$MIIP_1$	$MIIP_2$	$MIIP_3$
1. Net Present Value, th. UAH	50	47	41
2. Corrected Net Present Value, th. UAH	34	21	22
3. Total index of key success factors	1,88	2,43	2,02
4. Complex index indicator of effectiveness of real MIIP, th. UAH	63	50	42

Thus, it can be concluded that, for the most accurate results of assessing of the effectiveness of marketing innovative and investment projects the probability of such projects of success implementation must be taken into account in practice as factors influence of external environment.

Solution of the problem of modeling of the optimal marketing innovative and investment portfolio process formation based on real, alternative (from the standpoint of the project period implementation) projects is actual direction of further scientific researches in the marketing of innovations sphere at the engineering enterprises.

Conclusions. Thus, the use of a formalized statement of the problem in the author's version in the sphere of marketing and innovative activity of engineering enterprises allows:

– to expand the horizons of the practical application of the well-known method of net present value applying it to the marketing innovative and investment projects;

– to ensure the correctness of the recommended calculative methodic on taking into account the success factors of projects implementation in the sphere of marketing, the inflation factor influence, the risk and different duration of real projects implementation.

Future research. Author's vision of further scientific researches perspectives in this direction of study is in scientific and methodic tolls of optimal marketing innovative and investment portfolio formation development taking the approach described above as a base. The new approach implementation in practice will promote scientifically substantiated managerial decisions and will ensure optimization of the limited financial resources on the engineering enterprises distribution.

1. Гаркавенко С.С. Інновації як стратегія підвищення конкурентоспроможності фірми в умовах монополістичної конкуренції [Електронний ресурс] / С.С. Гаркавенко // Збірник тез доповідей VI Міжнародної науково-практичної конференції "Маркетинг інновацій і інновації в маркетингу" (27-29 вересня 2012 року). – Суми : ТОВ "ДД "Папірус", 2012. – С. 35-37.

2. Жовковська Т. Методика оцінювання впливу інновацій на конкурентоспроможність промислового виробництва / Т. Жовковська // Соціально-економічні проблеми і держава. – 2012 – Вип. 1 (6). – С. 210-216.

3. Коюда В.О. Інноваційна діяльність підприємства та оцінка її ефективності : монографія / В.О. Коюда, Л.А. Лисенко. – Х. : ФОП Павленко О.Г., ВД "ІНЖЕК", 2010. – 224 с.

4. Яшева Г.А. Эффективность маркетинга: методика, оценки и результаты [Електронний ресурс] / Г.А. Яшева. – Режим доступу : http://www.cfin.ru/press/practical/2003-08/02.shtml.

5. Тенденции и перспективы развития маркетинга в современных условиях : монография / Е.В. Ромат, Н.В. Попова, И.Г. Андреева и др. ; под общей ред. Е.В. Ромата, Н.В. Поповой. – К. – Х. : ХНДАУ, 2013. – 436 с.

6. Маркетинг. Менеджмент. Інновації : монографія / за ред. д.е.н., проф. С.М. Ілляшенка. – Суми : ТОВ "Друкарський дім "Папірус", 2010. – 621 с.

7. Ахметзянов И.Р. Анализ инвестиций: методы оценки эффективности финансовых вложений / И.Р. Ахметзянов; под ред. д.э.н. Г.А. Маховиковой. – М. : Эксмо, 2007. – 272 с.

8. Беренс В. Руководство по оценке эффективности инвестиций / В. Беренс, П.М. Хавранек. – М. : АОЗТ "Интерэксперт", "ИНФРА-М", 1999. – 528 с.

9. Ковалев В.В. Финансовый анализ: Управление капиталом. Выбор инвестиций. Анализ отчетности / В.В. Ковалев : 2-е изд., перераб. и доп. – М. : Финансы и статистика, 2000. – 512 с.

10. Коюда П.М. Ефективність інноваційної діяльності підприємств: теорія та практика : монографія / П.М. Коюда, І.А. Шейко. – Х. : ТОВ "Компанія СМІТ", 2013. – 332 с.

11. Крамской Д.Ю. Методы оценки экономической эффективности инновационных проектов / Д.Ю. Крамской // Вістник Національного технічного університету "ХПІ". Технічний прогрес та ефективністьвиробництва. – Харьков : НТУ "ХПИ". – 2008. – №20 (1). – С. 227-233.

12. Кузьменко В. Создание новых товаров. Комплексная оценка инноваций / В. Кузьменко // Лаборатория рекламы, маркетинга и public relations. – 2003. – №6. – С. 20-23.

13. Нотовський П.В. Оцінка ефективності інвестиційних проектів за методикою покрокового відбору / П.В. Нотовський // Вісник Дніпропетровського національного університету. Економіка : проблеми теорії та практика. – Дніпропетровськ : ДНУ. – 2008. – №245 (IV). – С. 1055-1063.

14. Тєлєтов О.С. Оцінка ефективності маркетингової діяльності промислового підприємства / О.С. Тєлєтов // Вісник НУ "Львівська політехніка". Логістика. – Львів : Вид-во НУ "Львівська політехніка". – 2003. – №469. – С. 506-510.

15. Шейко І.А. Оцінка ефективності інноваційного проекту при фінансуванні за рахунок прибутку / І.А. Шейко, О.В. Стороженко // Вісник НТУ "ХПІ": Технічний прогрес та ефективність виробництва. – 2011. – №1. – С. 53-62.

16. Яковлєв А.І. Методика визначення ефективності інвестицій, інновацій, господарських рішень в сучасних умовах / А.І. Яковлєв. – Х. : Бізнес-Інформ, 2001. – 56 с.

17. Ястремська О.М. Інвестиційна діяльність промислових підприємств : методологічні та методичні засади : наукове видання / О.М. Ястремська. – Х. : ХДЕУ, 2004. – 471 с.

18. Доліна І.В. Обгрунтування інтегрального показника економічної ефективності технологічних інновацій / І.В. Доліна // Вісник Національного технічного університету "ХПІ". Технічний прогрес і ефективність виробництва. – Харків : НТУ "ХПІ". – 2007. – №13. – С. 140-146.

19. Умєров Р.Е. Принципи і методи оцінювання ефективності інноваційної діяльності малого та середнього бізнесу / Р.Е. Умєров // Актуальні проблеми економіки. – 2011. – №11. – С. 108-115.

1. Harkavenko, S.S. (2012). Innovatsii yak stratehiia pidvyshchennia konkurentospromozhnosti firmy v umovakh monopolistychnoi konkurentsii [Innovation as a strategy for improving the competitiveness of firms in monopolistic competition]. Proceedings from MIIM '12: *VI Mizhnarodna naukovo-praktychna konferentsiia "Marketynh innovatsii i innovatsii v marketynhu" – The Sixth International Scientific and Practical Conference "Marketing of Innovations and Innovations in Marketing"*. (pp. 35-37). Sumy: TOV "DD "Papirus" [in Ukrainian].

2. Zhovkovska, T. (2012). Metodyka otsiniuvannia vplyvu innovatsii na konkurentospromozhnist promyslovoho vyrobnytstva [Method of the innovation influence evaluation on the competitiveness of the industrial production]. *Sotsialno-ekonomichni problemy i derzhava – Socio-Economic Problems and the State, Issue l (6),* 210-216 [in Ukranian].

3. Koiuda, V.O., & Lysenko, L.A. (2010). *Innovatsiina diialnist pidpryiemstva ta otsinka yii efektyvnosti [Innovative activity of enterprise and evaluation of its effectiveness]*. Kharkiv: FOP Pavlenko O.G., VD "INZHEK" [in Ukrainian].

4. Yasheva, G.A. (2003). Effektivnost marketinha: metodika, otsenki i rezultaty [Marketing effectiveness: methodology, evaluation and results]. *www.cfin.ru.* Retrieved from http://www.cfin.ru/press/practical/2003-08/02.shtml [in Russian].

5. Romat, E.V., Popova, N.V., & Andreeva, I.G. (2013). *Tendentsii i perspektivy razvitiia marketinha v sovremennykh usloviiah [Tendencies and perspectives of marketing development in modern conditions]*. E.V. Romat, N.V. Popova (Eds.). Kyiv. Kharkiv: HNDAU [in Russian].

6. Illiashenko, S.M. (Eds.). (2010). *Marketynh. Menedzhment. Innovatsii. [Marketing. Menegment. Innovations]*. Sumy: TOV "DD "Papirus" [in Ukrainian].

7. Ahmetzianov, I.R. (2007). *Analiz investitsii: metody otsenki effektivnosti finansovyh vlozhenii [Investment analysis: methods for assessing the effectiveness of financial investments]*. G.A. Mahovikova (Ed.). Moscow: EKSMO [in Russian].

8. Behrens, W., & Hawranek, P.M. (1999). *Rukovodstvo po otsenke efektivnosti investitsii [Manual for evaluating the effectiveness of investments]*. (Trans, rev.). Moscow: AOZT "Interekspert", "INFRA-M" [in Russian].

9. Kovalev, V.V. (2000). *Finansovyi analiz: upravlenie kapitalom. Vybor investitsii. Analiz otchetnosti [Financial Analysis: Investment management. The choice of investments. Analysis of reports] (2nd ed., rev).* Moscow: Finansy i statistika [in Russian].

10. Koyuda, P.M. (2013). *Efektyvnist innovatsiinoi diialnosti pidpryiemstv: teoriia ta praktyka [The effectiveness of enterprise' innovation activity: theory and practice]*. Kharkiv. TOV "Kompaniia SMIT" [in Ukrainian].

11. Kramskoy, D.Yu. (2008). Metody otsenki ekonomicheskoi effektivnosti innovatsionnykh proektov [Methods for assessing the cost-effectiveness of innovative projects]. *Vestnik Natsionalnoho tehnicheskoho universiteta "KhPI". Tekhnicheskii prohress i effektivnost proizvodstva – Herald of the National Technical University "KhPI". Technological progress and efficiency, 20,* 227-233 [in Russian].

12. Kuzmenko, V. (2003). Sozdanie novykh tovarov. Kompleksnaia otsenka innovatsii [Creating new products. Comprehensive assessment of innovation]. *Laboratoriia reklamy, marketinha i public relations – Laboratory of advertising, marketing and public relations, 6,* 20-23 [in Russian].

13. Notovskyi, P.V. (2008). Otsinka efektyvnosti investytsiinykh proektiv za metodykoiu pokrokovoho vidboru [Evaluation of investment projects effectiveness under the stepwise selection method]. *Visnyk Dnipropetrovskoho natsionalnoho universytetu. Ekonomika: problemy teorii ta praktyky – Bulletin of the Dnipropetrovsk National University. Economy: Issues of Theory and Practice*, *245,* 1055-1063 [in Ukrainian].

14. Tielietov, O.S. (2003). Otsinka efektyvnosti marketynhovoi diialnosti promyslovoho pidpryiemstva [Evaluating the effectiveness of marketing activities of industrial enterprises]. *Visnyk NU "Lvivska politekhnika". Lohistyka. – Bulletin NU "Lviv Polytechnic". Logistics, 469,* 506-510 [in Ukrainian].

15. Sheiko, I.A., & Storozhenko, O.V. (2011). Otsinka efektyvnosti innovatsiinoho proektu pry finansuvanni za rakhunok prybutku [Evaluation of innovative project effectiveness with funding from the profits]. *Visnyk NTU "KhPI": Tekhnichnyi prohres ta efektyvnist vyrobnytstva. – Bulletin of NTU "KPI": Technical Progress and Efficiency*, 1, 53-62 [in Ukrainian].

16. Yakovlev, A.I. (2001). *Metodyka vyznachennia efektivnosti investytsii, innovatsii, hospodarskykh rishen v suchasnyh umovah [Methodic of determining the efficiency of investment, innovation, business solutions in modern terms]*. Kharkiv: Biznes-inform [in Ukrainian].

17. Yastremska, O.M. (2004). *Investytsiina diialnist promyslovykh pidpryiemstv: metodolohichni ta metodychni zasady [Investments activity of industry enterprises: methodological and methodical bases]*. Kharkiv: KDEU [in Ukrainian].

18. Dolina, I.V. (2007). Obhruntuvannia intehralnoho pokaznyka ekonomichnoi efektyvnosti tekhnolohichnykh innovatsiiy [Justification integral index of economic efficiency of technological innovation]. *Visnyk Natsionalnoho tekhnichnoho universytetu "KhPI". Tekhnichnyi prohres i efektyvnist vyrobnytstva – Bulletin of the National Technical University "KhPI". Technological progress and efficiency, 13,* 140-146 [in Ukrainian].

19. Umierov, R.E. (2011). Pryntsypy i metody otsiniuvannia efektyvnosti innovatsiinoi diialnosti maloho ta serednoho biznesu [Principles and methods of evaluating the effectiveness of innovation activity of small and medium business]. *Aktualni problemy ekonomiky. – Actual problems of economic, 11,* 108-115 [in Ukrainian].

Л.В. Соколова, д-р екон. наук, професор, професор кафедри економічної кібернетики та управління економічною безпекою, Харківський національний університет радіоелектроніки (м. Харків, Україна);

Г.М. Верясова, ст. викладач кафедри економічної кібернетики та управління економічною безпекою, Харківський національний університет радіоелектроніки (м. Харків, Україна);

О.Є. Соколов, здобувач кафедри економічної кібернетики та управління економічною безпекою, Харківський національний університет радіоелектроніки (м. Харків, Україна); начальник Донецького Регіонального Управління "УкрСиббанк" BNP Paribas Group (м. Донецьк, Україна)

До питання вибору ефективних маркетингових інноваційно-інвестиційних проектів у машинобудуванні

У роботі обґрунтовано актуальність дослідження проблеми маркетингу інновацій як засобу підвищення конкурентоспроможності підприємств машинобудування. Проведено аналіз існуючих науково-методичних підходів до оцінки ефективності маркетингових інноваційно-інвестиційних проектів у сфері виробництва промислових товарів. Запропоновано методику вибору оптимального варіанта проекту з урахуванням впливу інвестиційних ризиків та інфляції.

Ключові слова: інновації, інвестиції, маркетинг, проект, ефективність, модель, підприємство.

Л.В. Соколова, д-р экон. наук, профессор, профессор кафедры экономической кибернетики и управления экономической безопасностью, Харьковский национальный университет радиоэлектроники (г. Харьков, Украина);

А.Н. Верясова, ст. преподаватель кафедры экономической кибернетики и управления экономической безопасностью, Харьковский национальный университет радиоэлектроники (г. Харьков, Украина);

О.Е. Соколов, соискатель кафедры экономической кибернетики и управления экономической безопасностью, Харьковский национальный университет радиоэлектроники (г. Харьков, Украина); начальник Донецкого Регионального Управления "УкрСиббанк" BNP Paribas Group (г. Донецк, Украина)

К вопросу выбора эффективных маркетинговых инновационно-инвестиционных проектов в машиностроении

В работе обоснована актуальность исследования проблемы маркетинга инноваций как средства повышения конкурентоспособности предприятий машиностроения. Проведен анализ существующих научно-методических подходов к оценке эффективности маркетинговых инновационно-инвестиционных проектов в сфере производства промышленных товаров. Предложена методика выбора оптимального варианта проекта с учетом влияния инвестиционных рисков и инфляции.

Ключевые слова: инновации, инвестиции, маркетинг, проект, эффективность, модель, предприятие.

Отримано 01.11.2014 р.