



TRANSPORT TECHNOLOGY

ORGANIZATIONAL PLANNING PRINCIPLES FOR MULTIMODAL TRANSPORT

page 4-6

The paper considers the organizational planning principles and approaches for multimodal transport between Ukraine and other countries, the studies of which are conducted within the institutional Twinning project in the field of multimodal transport and logistics. The subject of the research is the planning process of multimodal routes in Ukraine to determine the success of projects on providing the rail transport services, which meet the international quality standards. The studies are based on the adaptability of the organizational principles of the rail multimodal transport in Ukraine to advanced experience of experts of the French railways (SNCF). The analysis of the current state of the development problem of the multimodal transport in Ukraine is given in the paper. The organizational planning principles for the multimodal transport were determined, for what the key aspects of the project were defined, the development strategy was formed and brief analysis of the effectiveness of potential multimodal projects was carried out. The conducted studies allow using the scientific and practical approaches to determine the success of potential projects on providing the rail transport services.

Keywords: multimodal transport, container, route, tariff, rail transport planning

References

1. Project Twinning. Available: [www.facebook.com / twin.multimodal](http://www.facebook.com/twin.multimodal).
2. Alyoshinsky, E. S. (2009). Osnovy formuvannya processu mizhnarodnih vantazhnikh zaliznichnikh perevezhen. Dis....Dokt. Tehn. Nauk: 05.22.01. Kharkiv, 620.
3. Dan'ko, M. I., Alyoshinsky, E. S., Shvaryov, D. A. (2008). Monitoring roboty derzhavnih mitnih organiv Ukraine ta formuvannya peredumov dlya zminy porjadku vzajemvidnosin v systemi "Pereviznik - Mitnyzycja". Zaliznichniy transport Ukraine, №2 (59), 11-13.
4. Alyoshinsky, E. S. (2008). Modeljuvannya systemi pererobky exportno-importnogo vantazhpotoku na priportovih zaliznichnikh stancijah. Eastern-European Journal Of Enterprise Technologies, 3(3(33)), 20-23.
5. Dan'ko, M. I., Alyoshinsky, E. S. (2009). Suchasny koncepcii analizu funkcionuvannya processu mizhnarodnih vantazhnikh perevezhen. Zbirnik nauk. prac' USART, №102, 5-14.
6. Kozak, V. V., Dan'ko, M. I., Lomot'ko, D. V., Alyoshinsky, E. S. (2010). Perspektivy organizacii gruzovih zheleznodorozhnikh perevozok mezhdou Ukrainoy i drugimi gosudarstvami-chlenami OSZD. Bjulleten' OSZD, Warshava, №3-4 (311-312), 22-25.
7. Kozak, V. V., Dan'ko, M. I., Alyoshinsky, E. S. (2011). Analiz effektivnosti zastosuvannya principiv interoperabelnosti pri realizacii programy pererozpodilu poizdopotokiv v mezhah mizhnarodnih transportnih koridoriv Ukraine. Zbirnik nauk. prac' NTU KhPI, №4, 70-77.
8. Alyoshinsky, E. S., Balaka, E. I., Shuldiner, J. V., Svitlichna, S. O., Sivakoneva, G. O. (2012). Koncepcia diversifikacii dijalnosti zaliznichnogo transportu Ukraine na osnovi stvorennja regionalnih transportno-logistichnikh clusteriv. Zaliznichniy transport Ukraine, №6 (97), 24-28.
9. Wanderpepen, X. (2013). Market study for MMTL in Ukraine, customs, documents and flow information. Second seminar on multimodal transport and logistics (October 17).
10. Wanderpepen, X. (2013). Successful multimodal projects. Trening seminar (December 5).

EXPERIMENTAL EVALUATION OF STATE DYNAMICS OF SYSTEM «DRIVER – VEHICLE»

page 6-8

The studies, given in the paper, deal with forecasting the evolution of systems. Despite the large number of studies on the evolution forecasting, many issues remain understudied. In particular, the evolution patterns of ergonomic systems require the additional studies. This justifies the relevance of the conducted studies. For the experimental investigation of the development patterns of the system "driver – vehicle – transport network – environment", the method for studying the prototype dynamics of the system - "driver" in the short time intervals can be used. The results of the experimental evaluation of state dynamics of the ergonomic system "driver – vehicle", which confirm the theoretical studies of forecasting the evolution of the system "driver – vehicle – transport network – environment" on qualitative differences in the state dynamics at the stages of destruction and formation of determinism in the system. Destruction of the old determinism is a necessary condition for the formation of the new one. This condition is formulated as the principle of systems functioning and is called "the principle of the necessary destruction of the old determinism". Occurrence of "the principle of destruction..." in the structure of driver's activities allows using it as one of the most important principles of design and maintenance of roads.

Keywords: system, forecasting, evolution, driver, state dynamics.

References

1. Arab-Oghli, E., Bestuzhev-Lada, I., Gavrilov, N. et al. (1982). Workbook Forecasting. Moscow: Misl, 430.
2. Sargsyan, S. (1977). The theory of prediction and decision-making. Moscow: Vicshaya Shkola, 252.
3. Jantsch, E. (1970). Prediction of scientific and technical progress. Moscow: Progress, 568.
4. Barrel, Y. (1972). The rate of technical progress the "Indianapolis 500" Journal of Economic Theory, 4, 72-81.
5. Felner, W. (1969). Specific interpretation of learning by doing. Journal of Economic Theory, 1, 119-140.
6. Poirier, D. (1981). Econometrics of structural change. Moscow: Financi i Statistica, 183.
7. Rankin, B. W., Clough, P. K., Halbert, S. et al. (1981). Road transport and traffic management: a guide. Moscow: Transport, 592.
8. Grigorov, M. A., Gavrilov, E. V., Grigorov, T. M., Dolya, V. K. (2006). Forecasting the design characteristics of the design and operation of highways [Prognozirovanie raschetnih karakteristik dlya proektirovaniya i ekspluatatsii avtomobilnih dorog]. Kherson, Naddnepryanochka, 192.
9. Lisichkin, V. (1972). Theory and practice of prognostics. Moscow: Nauka, 224.
10. Ivakhnenko, A. Lapa, V. (1965). Cybernetic predicting device. Kyiv: Naukova Dumka, 214.
11. Lynnyk, I. (2011). Theoretical bases of forecasting of evolution system «the driver – a vehicle – transport network – environment». Quality Technology and Education, 61-67.
12. Dolya, V., Lynnyk, I., Sanko, Y. (2011). Prediction of evolution system «the driver – a vehicle – transport network – environment». Herald of the Donbas National Academy of Civil Engineering and Architecture, 5(91), 220-223.

13. Linnik, I. (2012). Forecasting of evolution of ergonomic systems by a method of evoljutsionno-likelihood modelling. *Technology Audit And Production Reserves*, 5(2(7)), 27-28.
14. Antomonov, G. (1974). *Principles of neurodynamics*. Kyiv: Naukova Dumka, 200.

THE METHOD FOR TOURIST TRAILERS SCHEDULE DEVELOPMENT

page 8-10

In spite of existing methods for long distance passenger train schedule development, the organization of tourist travels in trailers was not paid much attention to until now and, therefore, to schedule development for such cars as a part of long distance trains keeping to an approved train schedule. This article contains the methods for tourist trailers schedule development based on imitation modeling created for application at the railway transport. It was found that the presented method results in labor intensity decrease of optimal schedule development for tourist trailers running as a part of route passenger trains and increase of planning quality for tourist routes at the railway transport.

Keywords: passenger train schedule (PTS), tourist trailer (TT).

References

1. Sivakoneva, G. O. (2012). Development schedules tourist passenger trains in Ukraine. *Odessa: KUPRYENKO*, 8-9.
2. Sivakoneva, G. O. (2012). Construction of mathematical models of production lines handling passenger trains at railway stations. *Kharkiv: Collection UkrDAZT, Issue 131*, 61-67.
3. Sivakoneva, G. O. (2012). Implementation of the passenger traffic in a vehicle of travel services. *Technology Audit And Production Reserves*, 5(1(7)), 41-42.
4. Alyoshynsky, E. S., Sivakoneva, G. O. (2013). An automated system for determining the input to the development schedule of trains using simulation. *Pat. Ukraine 76548: IPC (2013.01) V61L 27/00, № u 2012 06957, appl. 06.06.12, publ. 10.01.2013, Bull. Number 1*, 8.
5. Sivakoneva, G. O. (2013). Grounds for modeling the process of passenger rail transport in the interaction with tourist organizations. *Kyiv: Proceedings of the Ninth International Scientific and Practical Internet Conference «Modern Science on the Internet»*, 74-76.
6. Sivakoneva, G. O. (2013). The use of automated systems to determine the length of rail. *Dnepropetrovsk: Proceedings of ISPC 73 "Problems and prospects of development of rail transport"*, 167-168.
7. Sivakoneva, A. A. (2013). Spent time detection technology passenger carriages in the movement for planning of lease relations with travel agencies. *Rostov-on-Don: Proceedings of ISPC "Transport - 2013", Part 1. Tehnycheskye and Economic Science*, 204-206.
8. Alyoshynsky, E. S., Sivakoneva, G. O., Svetlichnaya, S. O. (2013). Automated system for development schedules towed passenger cars travel destination using simulation modeling. *Application to a stalemate. Ukraine 07029: IPC (2013.06) V61L 27/00; patent UkrDAZT, № a 2013 07029, appl. 04.06.13*.
9. Sivakoneva, G. O. (2013). Analysis of the main stages of development of the tourist route in terms of transport by rail. *Odessa: Proceedings of the Second National Scientific*

Conference for Students and Young Scientists "Problems and prospects of transport: technology, management, economics, logistics, law", 34-36.

10. Sivakoneva, G. O. (2011). Tech improving the efficiency of passenger transport by rail based logistics studies of transport trips. *Dnepropetrovsk: Proceedings of the Third International Scientific Conference "Ukraine's integration into the international transport system"*, 65-66.

IMPROVING PROCESSING TECHNOLOGY OF INTERNATIONAL CONTAINER TRAFFIC VOLUMES

page 10-12

This paper presents questions of improving the existing processing technology of wagons with containers of international destinations, arriving to marshalling yards. The time, spent by these cars in marshalling yards was analyzed, and a number of operations, which lead to the recycling of wagons, were identified. The method for priority in processing of international traffic volumes with containers was proposed. The improved technology of interaction between the marshalling yards and adjoining port freight station, which specializes in processing container traffic volumes, was proposed. The time, spent by wagons with containers when sorting in marshalling yards and freight station was elementwise considered in accordance with the proposed interaction technology. The economy of processing time of wagons and reducing the load level of technical facilities at stations were determined.

Keywords: container traffic volumes, marshalling yards, freight station, sorting.

References

1. Pro skhvalennya strategiyi rozvitku zaliznichnogo transportu na period do 2020 roku. (2009). *The Cabinet of Ministers of Ukraine, Resolution, Strategy from 16.12.2009 № 1555-r*. Available: <http://zakon.nau.ua/doc/?uid=1095.5722.0>. Last accessed 30.12.2009.
2. Vetukhov, E. A., Avetikyan, M. A. (1986). *Kompleksnie metody sokrascheniya prostoya vagonov*. M.: Transport, 206.
3. Bakaev, O. O., Piroghkov, S. I., Revenko, V. L. (1999). *Mighnarodni transportni koridory – osobliivy prioritet Ukrainy na shlyakhu integratsiyi u novu ekonomichnu sistemu. Strategichna panorama*, № 4, 37-55.
4. Kogan, L. A., Kozlov, Yu. T., Sitnik, M. D. and others. (1991). *Konteynernaya transportnaya sistema*. M.: Transport, 264.
5. Abramov, A. A. (2004). *Konteynernie perezozki na gheleznodorozhnom transporte*. M.: RGOTUPS, 332.
6. Nazarenko, V. M., Nazarenko, K. S. (2000). *Transportnoe obespechenie vneshneekonomicheskoy deyatel'nosti*. M.: Tsentr ekonomiki i marketinga, 512. ISBN 5-85873-054-X.
7. Miloslavskaya, S. V., Plughnikov, K. I. (2001). *Multimodalnie i intermodalnie perezozki*. M.: RosKonsult, 368. ISBN 5-89805-024-8.
8. Kuznetsova, A. N. (2003). *Razrabotka metodiki rascheta optimal'nogo plana formirovaniya vagonov s konteynerami*. *Dissert. of Sciences*. M., 206.
9. Sharov, V. A. (2001). *Technologicheskoe obespechenie perezozok gruzov gheleznodorozhnim transportom v usloviyakh rinochnoy ekonomiki*. M.: Intekst, 198. ISBN 5-89277-030-3.
10. Vygodskiy, M. Ya. (2006). *Spravochnik po vyshey matematike*. AST, Astrel, 992. ISBN 5-17-012238-1, 5-271-03651-0.

ECONOMY

LOGISTICS APPROACH TO THE TECHNOLOGY AUDIT OF SCIENTIFIC AND TECHNICAL INNOVATION DEVELOPMENTS

page 13-15

The importance and the need of carrying out the technology audit are considered in the paper. The main purpose of the study is the use of logistics approach to the technology audit of scientific and technological innovation developments at early stages. The use of the Internet opportunities allows scientists from all over the world to collect the necessary information about conducted researches, as well as gives the opportunity to attract investors and accelerates the technology transfer process. The impact of efficient use of resources (money, time, staff, equipment, etc.) on the effectiveness of scientific developments is shown in the paper. The characteristic of development stages of the innovation project is given in the paper. It is shown in the paper that, at implementation of the scientific and technical innovation project, there is a certain area with the highest relative efficiency. The most favorable conditions for the commercialization of innovative projects are determined. Based on this statement, the criteria of selecting the promising scientific and technological developments are defined. The research results can be applied by scientists and representatives of investors for the definition of the most profitable and promising innovative projects for their further research and financing.

Keywords: logistics approach, technology audit, scientific and technical innovation development.

References

- Maslov, V. P. (2013). Logistic Approach to the Dependence of Efficiency of Scientific-and-Technical Projects on Resources. *Journal of Business and Management Sciences*, Vol. 1, No. 2, 14-17
- Pil'nov, H., Tarasova, O., Ianovskii, A. (2006). Kak provodit' tekhnologicheskii audit. Proekt EuropeAid «Nauka i komert-sializatsiia tekhnolohii», 99.
- Fesenko, O. M., Tishchenko, V. V., Maslov, V. P., Skliarenko, O. O., Rahulia, A. V., Luhovs'ka, H. H., Androsiuk, G. M., Kiiak, Yu. P. (2011). Sposib stvorennia elektronnoho tsentru virtual'noho ofisu (virtual'nikh ofisiv) transferu tekhnolohii. Patent Ukraini na korisnu model' № 62271 vid 25.08.2011, biul. № 16
- Skliarenko, O. O., Maslov, V. P., Fesenko, O. M., Androsiuk, G. M., (2011). Internet-portal yak instrument rozvytku tekhnolohii. *Problemi nauki*, 11, 20-24
- Internet-portal «Nanotekhnologii ta nanomateriali». Available: <http://www1.nas.gov.ua/programs/nano2b/Pages/default.aspx>
- Skliarenko, O. O., Androsiuk, G. M. (2013). Informaciini tehnologii v systemi innovatsiinogo rozvytku ta transferu tekhnologii. *Innovatsiina ekonomika*, 5, 330-332.
- Tsibul'ov, P. M., Chebotar'ov, V. P., Zinov, V. H., Stuii, Yu.; In: Tsibul'ova, P. M. (2005). *Upravlinnia intelektual'noi vlasnistiu*. K.: «KIS», 448.
- Androsiuk, G. M. (2013). Dzherela ta umovi finansuvannia nauково-doslidnykh robot ta innovatsiinykh rozrobok v Ukraini. *Problemi nauki*, 3, 2-7.
- Androsiuk, G. M., Kachur, N. V., Maslov, V. P. (2013). Modr eliuvannia procesu nauково-tekhnichnykh ta innovatsiinykh rozrobok zalezno vid umov finansuvannia. *Biznes Inform*, 6, 155-159.
- Androsiuk, G. M., Kachur, N. V., Maslov, V. P. (2013). Opd tymizatsiia djerel finansuvannia tcil'ovykh nauково-tekhnichnykh program. *Problemy ekonomiky ta upravlinnia*, 754, 121-127.

MODERN PERFORMANCE CHARACTERISTICS OF HEALTH INSTITUTIONS IN NORTH-WESTERN ECONOMIC REGION OF UKRAINE

page 15-17

Performance characteristics of health institutions in the Northwestern economic region of Ukraine were considered. The purpose of this paper is to identify modern performance characteristics of health institutions in the Northwestern economic region of Ukraine. During the study, the review of the territorial structure of health institutions in the Northwestern economic region of Ukraine was carried out, the reformation problems were studied; the influence of the reformation of the territorial structure of health institutions on the population was characterized. The problems of development of health institutions in the region were analyzed. Special attention was paid to the specifics of the industry reformation in Volyn and Rivne regions. The main obstacles in financing of health institutions were found out. The research results allow to assess the real state of development of health institutions in Volyn and Rivne regions, in view of the industry reformation. The obtained results can be used for further research of performance problems of health institutions in the Northwestern economic region, and also can be taken into account in further reorganization of the territorial structure.

Keywords: territorial organization, health institutions

References

- Podvirna, H. (2008). Zakonomirnosti vidpovidnosti terytorailniy organizatsii sfery ohorony zdorovja oblasnogo regiony (na prykladi Lvivskoi oblasti). *Visnyk Lvivskogo universytetu, Serija geografija*, 35, 58-65.
- Kucenko, V. I., Tryllenberg, G. I. (2005). *Sferahorony zdorovja: socialno-ekonomichnitaregionalniaspekty*. K.: G RPWS Ukrainy NAN Ukrainy, 366.
- Pushkar, O. (2010). Sutnist terytorailnoi organizatsii zakladiv ohorony zdorovja. *Naukovi zapyski, Ekonomichna ta socialna geografija*, 2, 56-63.
- Topchiev, O. G. (2009). *Osnovysuspilnoigeografii: pidruchv nykdljastud*. Goefraf. Specialnostej vyschyh navch. Zakladiv. Odessa: Astroprint, 544.
- Zaklady ohorony zdorovja stanom na 01 Lypnja 2011. Available: <http://www.rv.gov.ua/sitenew/main/ua/932.htm>.
- Zaklady ohorony zdorovja Volynskoi oblasti. Available: <http://4vlada.com/rivne/13170>.
- Baranovskij, W., Pryrozenko, K., Shevchenko, W. (1995). *Medyn ko-ekologichnyjatlas Ukrainy*. K.: Zelenyj svit, 368.
- Reformuvannia galuzi ohorony zdorovja oblasti. Available: <http://www.volodymyrrada.gov.ua/reformy/med/>
- Topchiev, O. G. (2005). *Suspilno-geografichnidoslidgennja: mop todologija, motody, motodyky*. Odessa: Astroprint, 632.
- Shabl'ij, O. I. (2001). *Suspilno-geografichnidoslidgennja: motodologija, motody, motodyky*. Lviv: Lv. Nac. Un-t I.Franka, 744.

IMPROVING THE COMPETITIVENESS OF INTEGRATED FORMATION OF SUGAR BEET COMPLEX

page 17-19

The article considers ways of improving the competitiveness of integrated formations of the sugar beet complex and some of results of our researches in this area are given. The main objective of the investigation is to work out methodological aspects and practical tasks for integrated development of the sugar beet

sub-complex in the region. Factors, forming the competitiveness of sugar on the whole extent from production of sugar beet to its selling, are analyzed. On the basis of these factors analysis a model is proposed for providing mutually beneficial relations between the participants of an integrated sugar beet formation and stimulating their interest in collaborative work taking into account organization of an optimal raw product zone of a sugar plant. It is proved that the key tasks to improve the competitiveness of an integrated sugar beet formation are: 1) cutting of sugar production costs through efficient utilization of energy resources 2) concentration of the marketing policy on search for new trade channels and diversification of production usage directions. Results of investigations may be used as instructor's manuals and introduced into practice of integrated sugar beet formations.

Keywords: integrated formation, sugar-beet industry, competitiveness, economic and mathematical model, strategy of energy saving, marketing policy.

References

1. Materialy Mighnarodnoi naukovo-tekhnichnoi konferentsiyi tsukrovykiv Ukrayiny "Buryakotsukrova galuz v umovakh natsionalnogo ta svitovogo rynkiv" (2011). Kyiv: Tsukor Ukrayiny, 272.
2. Mel'nyk, U. F., Sabluk, P. T. (2009). Agropromyslove vyrobnytstvo Ukrayiny: uroky 2008 r. i shlyakhy zabezpechennya innovatsiyynogo rozvytku. *Economika APK*, 1, 3-15.
3. Fursa, A. V. (2012). Rynok tsukroburyakovogo vyrobnytstva v Ukrayini. *Economika APK*, 6, 36-43.
4. Zaets', O. S. (2001). Sakharna promyshlennost' Ukrainy: stanovlenie, razvitie, restrukturyzatsiya. Kyiv: Naukova dumka, 325.
5. Kodens'ka, M. U., Parkhomenko, L. M. (2010). Stan ta formuvannya ekonomichnogo rozvytku tsukroburyakovogo vyrobnytstva. *AgroInkom*, №1-3, 18-21.
6. Fursa, A. V. (2009). Udoskonalennya tsinovogo mekhanizmu ta derzhavnoi pidtrymky buryakotsukrovoyi galuzi, *Visnyk KPNU*, 179-183.
7. Belenkova, M. I., Ragulina, I. I. (2011). Systematyzatsiya upravlinnya vyrobnychym potentsialom tsukroburyakovykh pidpryemstv. *Economika ta upravlinnya*, 1, 100-103.
8. Kutsekon', L. O. (2012). Kontseptual'ni zasady rozvytku pidpryemstv buryakotsukrovogo pidkompleksu. *Visnyk SNAU*, 2. Available: http://archive.nbuv.gov.ua/portal/Chem_Biol/Vsnau/2012_2/45Kucekon.pdf.
9. Bobov, G. B. (2012). The model of interaction between members of the sugar-beet integrated formation. *Agricultural Economics: Science. Journal LNAU*. Lviv: LNAU, T.5, №3-4, 156-162.
10. Bobov, G. B. (2012). Tekhnologicheskie aspekty povysheniya konkurentosposobnosti sveklosaharnogo integrirovannogo formirovaniya. *Saratov : Science, C. 2*, 31-38.

THE APPROACHES TO CLASSIFICATION OF EXPENDITURES ON INNOVATION ACTIVITIES

page 20-22

The essence and classification of expenditures on innovation activities of the enterprise, according to the different classification criteria, were studied in the paper. The aim of the research is to analyze the classification criteria of expenditures on innovation activities for the optimization and rational expenditure accounting at enterprises.

However, there are various classification criteria of expenditures on innovation activities of the enterprise that causes the necessity of their grouping. Based on the analysis of the views of national and foreign scientists on innovation expenditures, it

was proposed to distinguish such classification criteria: life cycle stages of innovative products and transaction type.

Using the classification criteria of innovation expenditures, given in the paper, will allow to improve the objectivity of the innovation activity assessment, to identify possible factors of increasing these expenditures at each stage of the life cycle of innovation products. The research results can be used by practicing accountants at innovation-active enterprises.

Keywords: innovation activities, expenditures, classification criteria, innovation expenditures.

References

1. Innovation in Australian Business. (2010-11). Australian Bureau of Statistics. Available: http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/8158.0Appendix_122010-11?opendocument&tabname=Notes&prodno=8158.0&issue=2010-11&num=&view=
2. Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data. (2005). Ed. 3. Paris: Organization for Economic Cooperation and Development (OECD) and Statistical Office of the European Communities (Eurostat), 163.
3. Frascati Manual: Proposed Standard Practice for Surveys on Research and Experimental Development. (2002). Ed. 6. Paris: Organization for Economic Cooperation and Development, 254.
4. Avilkina, M. (2009). Oblik vitrat na innovatsii: stan i napriami rozvytku. *Bukhhalters'kii oblik i audit*, 7, 44-52.
5. Baranovs'ka, S. P. (2009). Formuvannya ta upravlinnia rozvytkom innovatsiinykh struktur v mashinobuduvanni: avtoref. na zdobuttia nauk. stupenia kand. ekon. nauk: spets. 08.00.04 spets. «*Ekonomika ta upravlinnia pidpriemstvami*». Lviv, 24. Available: <http://ena.lp.edu.ua:8080/handle/ntb/3217>.
6. Derzhavnii komitet statistiki Ukraini. Available: <http://www.ukrstat.gov.ua>.
7. Il'chenko, O. O. (2009). Oblik ta analiz vitrat na innovatsii: upravlins'kii aspekt: avtoref. dis. na zdobuttia nauk. stupenia kand. ekon. nauk : spets. 08.00.09 «*Bukhhalters'kii oblik, analiz ta audit*». Kii, 21.
8. Kostirko, L. A., Martinov, A. A., Nad'on, H. O. (2011). Analitichni instrument otsiniuvannya efektyvnosti zatrat na innovatsiinu diial'nist' pidpriemstva: monohrafiia. Luhans'k: Noulidzh, 246.
9. Zhukovich, I. A., Rizhkova, Yu. O., Kalachova, I. V., Bilokon', O. I., Bilen'ka, N. A. (2012). Metodolohichni polozhennia zi statistiki innovatsiinoi diial'nosti. Kii: Derzhavna sluzhba statistiki Ukraini, 32.
10. Romanets', I. V. (2009). Vznachennia ekonomichnoi efektyvnosti vitrat na stvorennia ta vprovadzhennia informatsiinoi sistemi z vikoristanniam heoinformatsiinykh tekhnolohii. Menedzhment ta pidpriemnitstvo v Ukraini: etapi stanovlennia i problemi rozvytku, 647, 191-197.

IMPACT OF THE CROSS-BORDER COOPERATION ON INNOVATIVE ENTERPRISES DEVELOPMENT IN WEST UKRAINIAN BORDER

page 22-24

The issues of the impact of cross-border cooperation on the small and medium enterprise development in border regions are considered in the paper. The main objective of the paper is to show the need for development of cross-border relations between enterprises in border territories to develop the business sector and region in particular, to assess the impact of introducing advanced technologies by small and medium enterprises on the transformation of economies in the border territories. The features of introducing advanced technologies by the business sector in the West Ukrainian border are analyzed. The typing

of innovative small and medium enterprises in the Ukrainian border territories is investigated. The conducted research allows realistic assessment of benefits from the introduction of advanced technologies within the border territories for the development of regions and business sectors. The obtained results can be used in making up and implementation of programs for the innovative economy sector development in the West Ukrainian border regions.

Keywords: cross-border cooperation, small and medium enterprise, innovations.

References

1. Berezovskij, K. W. (2010). Innovacii – stymulvitchyznanoi-ekonomiky. Materialy IX miznarodnoi naukovo-praktychnoi kongerencii: Rozvytok pidpryjemnytva jak factor rostu nacionalnoi ekonomiky, 22-23.
2. Wasylciv, T. G. (2009). Transkordonne spivrobotnytvo ta ekonomichna bezpeka malogo pidpryjemnytva jak chynnyk rozvytku prykordonnykh regioniv Ukrainy. Zbirnyk LNTU. Serija Economichna teorija ta economichna istorija, 6(23), T1, 128-140.
3. Vernydub, N. O., Omeljanenko, V. A. (2012). Tendencii globalizacii innovacijnoi dijalnosti. Economichni problemy stalogo rozvytku, materialy dopovidej Sumskogo derzavnogo universytetu, T.1, 35-37.
4. Goshchinskij, A. V., Bakushevych, D. J. (2008). Vykorystannja informacijno-komunikacijnykh tehnologij v procesi zabezpechennja konkurentospomoznosti prykordonnykh terytorij. Regionalna ekonomika, 4,63-71.
5. Pytiwnyk po programach scho finansujutsja Evropejskym Sojuzom w Ukraini. Available: http://eeas.europa.eu/delegations/ukraine/documents/virtual_library/guide2011_eu_fundingprogrammes_uk.pdf.
6. Chupryna, O. O. (2012). Transkordonne spivrobotnytvo: perspektivy dla zbalansovanogo rozvytku prykordonnykh terytorij. Economichni problemy stalogo rozvytku, Materialy dopovidej Sumskogo derzavnogo universytetu, T1, 191-192.
7. Smallbone, D. (2012). Cross-border entrepreneurship and economic development in Europe's border regions. Cheltenham, UK, 276.
8. Hans, J. (2008). Internationalization of small and medium sized enterprises. Journal of the International Management, 14, 65-77.
9. Huber, P. (2003). On the determinants of cross-border cooperation of Austrian firms with Central and Eastern European partners. Regional Studies, 37 (9), 47-55.
10. Cross-border cooperation and economic development in border region of Western Ukraine. Available: <http://www.tse.fi/pei/pub>.

AUTOMATIC STABILIZERS IN UKRAINIAN FISCAL SYSTEM

page 24-26

The structure of the anti-crisis fiscal automatic stabilizers and the power of their influence on the dynamics of economic recovery in Ukraine are the subjects, studied in the paper. With the tool of comparative analysis between the tax systems of Ukraine and some EU countries, the determinants that enhance their effect in the domestic economy are identified. First of all, it is high sensitivity of the state budget settings to the economic situation. The factors that weaken their action are the bias of the tax burden towards indirect taxes and high trade openness of the economy. Quantifying the magnitude of automatic stabilizers showed a low level of their contribution to smoothing cyclical fluctuations that indicated the inefficiency of the national tax system and the

need for activation of the discretionary component of the government's fiscal policy.

Keywords: fiscal policy, automatic stabilizers, cyclically adjusted budget balance, economic dynamics.

References

1. Giorno, C. et al. (1995). Estimating Potential Output, Output Gaps and Structural Budget Balances. OECD Economic Department Working Papers, OECD Publishing, No. 152, 53.
2. Van den Noord, P. (2000). The Size and Role of Automatic Fiscal Stabilizers in the 1990s and Beyond. OECD Economics Department Working Papers, OECD Publishing, No. 230, 31.
3. Blanchard, O., Perotti, R. (2002). An Empirical Characterization of the Dynamic Effect of Changes in Government Spending and Taxes on Output. NBER Working Paper, No. 7269, 31.
4. Sokolovska, A., Koschuk, T. (2012). Podatkova polityka v Ukraini v konteksti tendentsiy reformuvannya opodatku vannyha v krainah ES. Finansy Ukrainy, № 1, 94-121.
5. Dlugopolskiy, O. (2012). Publichni finansy za umov finansoi vo-ekonomichnoi kryzy ta transformatsii svitovoi ekonomicy. Finansy Ukrainy, № 8, 106-117.
6. Dmytrenko, G. (2009). Rol fiskalnoi polityky v antytsyklichnomu reguluvanni ekonomicy. Visnyk Nacionalnoi Akademii Dergavnogo Upravlinnya, № 3, 79-86.
7. Monitoring tax revenues and tax reforms in EU Member States 2010. Tax policy after crisis. (6 October 2010). European Commission, 85.
8. Veld, J., Larch, M., Vandeweyer, M. (2012). Automatic Fiscal Stabilizers: What they are and what they do. European Commission Directorate-General for Economic and Financial Affairs Publications. Economic Papers, №452, 21.
9. Buti, M., Brunila, A., Veld, J. (2002). Fiscal Policy in Europe: how effective are automatic stabilizers? European Commission Directorate-General for Economic and Financial Affairs Publications. Economic Papers, № 177, 32.
10. Baunsgaard, T., Symansky, S. (28 September 2009). Automatic Fiscal Stabilizers: How They Can Be Enhanced Without Increasing the Size of the Government? IMF Fiscal Affairs Department, 26.
11. Fedelino, A., Ivanova, A., Horton, M. (November 2009). Computing Cyclically Adjusted Balances and Automatic Stabilizers. IMF Fiscal Affairs Department, 12.

MANAGEMENT OF THE BORROWING CAPITAL BY INFLUENCE ON CORPORATE MARKET VALUE

page 26-29

The article is devoted to problems of impact valuation of management on the market value of domestic oil refineries by formation of credit resources. The main goals of the research are to describe the simplest method of analysis and modify the standard analytical methods to use them in valuation of unprofitable activity of the Ukrainian oil refineries. The author uses statistical approaches in the analysis of enterprises' empirical financial data.

To achieve the main goals the author chooses cash value added (CVA) as a benchmark and investigates its change influenced by book value and market value of unprofitable businesses' borrowing capital. The article touches upon the problems of calculation of market value of borrowing capital; the author modified the formula of weighted average cost of capital which has a negative amount of equity capital. The problems of calculation of enterprises' CVA with a negative amount of gross (brutto) investments are also considered.

The principles of calculation described by the author allow defining the efficiency of financial management precisely and objectively and can be used in activity of financial divisions of the Ukrainian enterprises.

Keywords: cash value added, value of the borrowing capital, brutto investments, beta ratio

References

1. Miller, M., Modigliani, F. (1961). Dividend, Policy, Growth, and the Valuation of Shares. *The Journal of Business*, Vol. 34, No. 4, 411-433. Available: <http://www.jstor.org/discover/10.2307/2351143>. Last accessed 23 November 2013.
2. Miller, M., Modigliani, F. (June 1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *American Economic Review*, 261-297.
3. Sharpe, W. (1970). *Portfolio Theory and Capital Markets*. McGraw-Hill: N. Y., USA.
4. Knight, J. A. (1998). *Value-Based Management: Developing a Systematic Approach to Creating Shareholder Value*. McGraw-Hill: N.Y., 307.
5. Weissenrieder, F. (1997). Value Based Management: Economic Value Added or Cash Value Added? *Gothenburg Studies in Financial Economics: Study No. 1997:3*; Gothenburg University: Gothenburg, Sweden. Available: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=156288. Last accessed 23 November 2013.
6. Friedl, G., Kettnering, T. (March 2009). A Note on the War of Metrics. *Control TUM Business School*, 14. Available: http://www.controlling.wi.tum.de/fileadmin/w00bel/layout/downloads/vorlesungsunterlagen/SS10/VBM/Note_on_War_of_metrics.pdf. Last accessed 23 November 2013.
7. Zavorotniy, R. I. (2012). *Finansovaya otsenka biznesu: teoriya, praktika ta innovatsiyni pidhody: Monographiya [Financial business valuation: theory, practices and innovative approaches: Monograph]*, K.: KNEU, Ukraine, 295 p.
8. The official site of Agency of development of the Ukrainian stock market infrastructure. Available: <http://www.smda.gov.ua>. Last accessed 23 November 2013.
9. Tereschenko, O. O., Babyak, N. D. (2013). *Finansovy controling [Financial controlling]*. K.: KNEU, Ukraine, 407.
10. *Dinamika izmeneniya kreditnyh stavok dlya yuridicheskikh lits v Ukraine, UAH, 12 mesyatsev [Dynamics of change of credit rates for legal entities in Ukraine, UAH, 12 months]*. Available: http://charts.finance.ua/ru/credit_deposit/credit_jur/~2/uah/3. Last accessed 23 November 2013.

ASSESSMENT OF THE COMPETITIVE FUNCTIONING ENVIRONMENT OF ENTERPRISES-PRODUCERS OF FRUITS AND BERRIES PRODUCTS

page 29-31

It is established that the potential fruit-and-berries sector in Ukraine is able to provide not only domestic needs but also produces fruit products for export and takes place among strategic sectors of the national economy. However, the development of fruit growing in the country is characterized by a number of negative trends. It was found that the major manufacturers and suppliers of fruits and berries are enterprises of Vinnytsia region, Kherson region and Autonomy Republic of Crimea, where there is a greater amount of agricultural enterprises in comparison with other regions. Agricultural enterprises are primarily engaged in production of pome crops and hardly produce berries and thus they are characterized by lower yields but a higher level of marketability of fruits and berries than in households. The main sales channels for

agricultural enterprises are commercial enterprises and for households they are unregulated and roadside markets. The country has been neglected the most effective system of selling of fruits and berries production in the world such as wholesale and wholesale-and-retail markets. It was proved that the pricing on fruits and berries production occurs under the constant effect in most cases of discordant factors which include: supply and demand ratio, quality indexes of fruits and berries, time period and place of sale/ distribution channel, cost price of production and production distribution, solvency of population, level of taxes and other charges, etc.

Keywords: agricultural enterprises, fruit and berries, demand, supply, marketing channels, price.

References

1. Ermakov, O. U., Kasil', M. I., Chornodon, V. I. (2011). *Efektivnist' investytsiy u sadivnytstvo*. Ternopil': Krok, 233.
2. Ermakov, O., Kushniruk, V., Ermakov, I. (2009). *Rozvytok agropromyslovogo kombinuvannya sadivnyts'kykh pidpryemstv regionu. Bukhgalteriya v sil's'komu gospodarstvi*, №15-16, 42-48.
3. Kondratenko, P. V., Shestopal', O. M., Barabash, L. O. (2008). *Teoretychni zasady vidrodzhennya ta rozvytku promyslovogo sadivnytstva v Ukraini*. *Sadivnytstvo*, vyp. 61. Available: http://archive.nbuv.gov.ua/portal/chem_biol/Sad/2008_61/1.pdf.
4. Barabash, L. O., Ermakov, I. O. (2007). *Napryamyaktyvizatsiyni innovatsiynoi diyal'nosti sadivnyts'kykh pidpryemstv*. *Naukoviy visnyk NAU*, vyp 110, 222-227.
5. Rul'ev, V. A. (2007). *Konkurentospromozhnist' plodiv i yagid*. Melitopil': Vydavnychiy budynok MMD, 315.
6. Rul'ev, V. A. (2006). *Potentsial promyslovogo sadivnytstva Ukrainy i osnovni napryamy yogo efektyvnogo vykorystannya*. Mykolayiv, 462.
7. Salo, I. A. (2009). *Metodychni polozhennya prognozuvannya kon'unktury rynku plodiv i yagid v Ukraini*. Kyiv: BTs NUBIP, 60.
8. *Statystychna informatsiya Derzhavnoyi sluzhby statystyky Ukrainy*. Available: <http://www.ukrstat.gov.ua>.
9. *Galuzeva programa rozvytku sadivnytstva Ukrainy na period do 2025 roku (2008)*. Available: http://uazakon.com/documents/date_cu/pg_gbwsl/index.htm.
10. *Postanova Kabinetu Ministrsv Ukrainy "Pro zatverdzhennya Derzhavnoyi tsil'ovoyi program stvorennya optovykh rynkiv sil's'kogospodarts'koyi produktsiyni (2009)*. Available: <http://zakon4.rada.gov.ua/laws/show/562-2009-п>.

KNOWLEDGE MANAGEMENT IN DOMESTIC PRACTICE

page 32-34

The article considers key notions of using knowledge management in domestic practice. The main purpose of this investigation is the selection of main guidelines of realization of indicated concept realization at enterprises and the substantiation of the way of activating this process. This article deals with the main approaches to the formation of knowledge management strategies, based on the using of information technology and human resources. Using technologies of knowledge management allows to increase the quality and the efficiency of managerial decisions, to improve the response on changes in the working environment of the enterprise, the quality of customer service. The presented methodology of knowledge management implementation allows to comprehensively use enterprise resource capabilities to convert them into the potential of development. The results of investigation can be applied by managers and employees in the field of personnel management. We offer successive overcoming of barriers on the way of using of knowledge management elements at enterprises and focus attention on the principle of training.

Keywords: knowledge, development, information, data, management, learning, strategy of knowledge management.

References

- Regan, E. (2007). The evolving concept and practice of knowledge management: seeking a common understanding and definition. Available: <http://www.irma-international.org/viewtitle/33390/>
- Zelencova, M. G. (2011). Semantichnyi prostir conceptu «menedzmentu znan». Visnyk Dnipropetrovskogo universytetu. Seriya «Movoznavstvo», Vyp. 17, T. 3. Available: <http://archive.nbuv.gov.ua>
- Upravlenie znaniyami. Available: <http://www.netsoash.eu.som/index.php?id>
- Andrusenko, T. (2004). Integratsiya znan predpriyatiya. Korporativnie sistemi, №2. Available: <http://www.management.com.ua/ims/ims093.html>.
- Wiig, K. (1997). Supporting knowledge management: a selection of methods and techniques. Expert Systems With Applications, vol. 13, No 1, 15-27. Available: www.hcs.science.uva.nl
- Vavzhyniak, B. Upravlinnya znaniyami - viklik maybutn'ogo. Available: <http://www.management.com.ua/hrm/hrm016.html>.
- Lytvyn, V.; Pasichnyk, V. (2013). Tehnologiyi menedzmentu znan. Ed. 2. Lviv Polytechnic National University Publishing House, 260.
- IT-tehnologiyi. Available: <http://www.irkinfo.ru/>
- Verba, V. A. (2011). Upravlinnya rozvytkom kompaniyi. KNEU, 482.
- Khmelnitskii, G. Kamni pretkoveniya otsenki effektivnosti obucheniya. Available: <http://www.hrm.ua/article/>
- Afanas'ev, V. (2008). Kombikormovaia promyshlennost' Rossii: proshloe, nastoiashchee, budushchee. Kombikorma, 2, 4-9.
- Hlebov, L. A., Kas'ianov, B. V. (2008). Proektirovanie kombikormovykh zavodov s osnovami SAPR. M.: VO «Ahropromizdat», 303.
- In: Paskhaver, B. I. (2005). Hospodars'kii mekhanizm ahropromislovoho kompleksu krizovoho periodu. K.: In-t ekon. NAN Ukraini, 351.
- Dzhordzh, S., Vaimerskikh, A. (2002). Vseobshchee upravlenie kachestvom: stratehii i tekhnolohii, primeniaemye sehodnia v samykh uspeshnykh kompaniiakh (TQM). SPb.: Viktoria plus, 256.
- Zavads'kii, I. S. (1992). Upravlinnia sil's'kohospodars'kim virobnitstvom v sistemi APK. K., 367.
- Kas'ianov, B. (2006). Vybor mnohokomponentnykh vesov dlia kombikormovoho proizvodstva. Mukomolyu-elevatornaia i kombikormovaia promyshlennost', 4.
- Matsuha, O. N. (2006). Perspektivy ukrainskoho kombikormovoho proizvodstva. Khranenie i pererabotka zerna, 9, 14-15.
- Soloshonok, A. L., Surzhavs'kii, V. M., Svitets'kii, V. V. (2007). Suchasni stan ta perspektivi virobnitstva kombikormiv dlia sil's'kohospodars'kikh tvarin. Produktivnist' ahropromislovoho virobnitstva, 6, 106.
- Ushtomirskaiia, L. A., Chudakov, A. D. (1996). Printsipy formirovaniia hrupp nezavisimykh ekspertov pri otsenke perspektivnosti tekhnolohicheskikh novovvedenii. STIN. №1, 22-25.

STRATEGIC COST MANAGEMENT AS THE MAIN COMPONENT OF STRATEGIC MANAGEMENT ACCOUNTING

page 36-38

THE FUNCTIONAL DIAGRAM OF PRODUCT QUALITY MANAGEMENT ON MIXED FODDER ENTERPRISES

page 34-36

The functional diagram of product quality management on mixed fodder enterprises is proposed in the paper. The method of activity analysis of mixed fodder enterprises, which allows to increase the product quality and to improve the competitiveness in the market environment, is proposed.

Modern production level allows the transition to automated accounting of raw materials, semi-products and products during the whole production process. The bases for such accounting are usually industry standards or technological instructions, developed on the mixed fodder enterprise. Factors, listed above, as well as non-isomorphism of accompanying information flows allow to refer the automated accounting system in TP to the class of complex information systems, modeling and research of which requires a nonstandard approach that, in turn increases the quality management on the mixed fodder enterprise. The research results can be applied on the mixed fodder enterprises.

The method of activity analysis of mixed fodder enterprises, which allows to increase the product quality and to improve competitiveness in the market environment, is proposed.

Keywords: mixed fodder enterprises, functional diagram, quality management, products, modeling, production cycle.

References

- Bessonova, L. P., Petrov, N. V., Druzhkova, E. N., Safonova, S. V. (1995). Analiz protsessov diskretnoho i nepreryvnoho dozirovaniia komponentov kombikormov: broshiura. Obzornaia informatsiia. Ser: Kombikormovaia promyshlennost'. M.: TsNIITEI «Khlebpodinform», 36.

The influence of cost management on making management decisions and functioning of the system of strategic management accounting was analyzed in the paper. The main aspects of the influence of strategic management accounting on making effective management decisions in the system of integrated management of business entities were highlighted. The scope of the organizational activity, covered by the strategic management accounting was described.

The paper shows the orientation of strategic management accounting towards the formation of the system of modern knowledge, which combines accounting concepts of making effective management decisions with the purpose of formation of business strategy of business entities, aimed at ensuring steady competitive advantages in the business environment. The combination of all these advantages allows economic entities to apply business strategies of various organizational levels in practice.

The measurement of quality costs and the preparation of corresponding reports are key functions of the system of management accounting both for industries and service sectors. In both cases, the management accounting system must be able to provide both operational and financial information concerning the quality, including such information as the quantity of defects, reports on the quality costs, reports on the quality costs tendencies and report on the execution of budgets of the quality costs.

The systems of management accounting in a broad sense can be classified as the accounting systems at function-oriented management and accounting systems in the management of kinds of activity. Both of these approaches can be applied in practice.

Keywords: strategic cost management, information system of strategic management accounting, activities of business entities

References

1. Atamas, P. (2006). Management accounting: Tutorial. D., K.: Center for textbooks, 440.
2. Druri, K. (2002). Management and production accounting. Translation from English. Textbook. M.: UNITI-D ANA.
3. Golov, S. F. (2003). Management accounting: Tutorial. K.: Libra, 704.
4. Word Kit. (2002). Strategic managerial accounting. Translation from English. M.: ZAO «Olymp-bisnes», 448.
5. In: Innes, J. (1998). Strategic Management accounting, in tones. Handbook of Management accounting, Gee, Ch. 2, 968.
6. Cooper, R., Kaplan, R. S. (September/October 1988). Measure costs right: make the right decisions. Harvard Business Review, 96-103.
7. Simmonds, K. (1981). Strategic management accounting. Management accounting, 59(4), 26-29.
8. Simmonds, K. (1982). Strategic management accounting for pricing: a case example. Accounting and Business Research, 12(47), 206-214.
9. Simmonds, K. (1986). The accounting assessment of competitive position. European Journal of Marketing, Organization and Society, 12(4), 357-374.
10. Bromwich, M. (1990). The case for strategic management accounting: the role of accounting information for strategy in competitive markets. Accounting, Organisation and Society, 1, 27-46.
11. Lord, B. R. (1996). Strategic management accounting: the emperor's new clothes? Management Accounting Research, 7(3), 347-366.