



ECONOMY OF ENTERPRISE

INTERRELATION OF ECONOMIC CONFIDENCE WITH OTHER TYPES OF CONFIDENCE

page 4–7

The paper gives the object and the subject of the study, which are used as a criterion allowing to separate the economic confidence from other types of confidence. The terms describing the psychological and sociological confidence are proposed. It was found that the economic confidence is interrelated with psychological confidence by motivation and advertising, sociological – by the results of activity of public organizations, state regulation of the economy. On the example of information-computer confidence (confidence in the system), the example of confidence in the banking system was considered and the result was obtained: in case the system does not justify the confidence, the principal has no confidence in the entire system (all system components, products, etc.).

The confidence is formed at the coincidence of basic values of participants of trust relationship. If there is no coincidence, the confidence will not be formed, and the acquired trust relations will become distrustful because of the change of behavior.

Keywords: confidence, economic confidence, object, subject, methods for studying the confidence.

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DEPRECIATION POLICY AND ITS IMPACT ON THE FINANCIAL PERFORMANCE OF PRODUCTION

page 7–11

The paper gives the comparative analysis of two systems of depreciation policy in Ukraine. The depreciation policy «before»

and «after» the adoption of the Tax Code of Ukraine, which has been used since January 1, 2011.

The analysis was carried out on the basis of the indicator – the period of full depreciation of fixed assets. The depreciation policy before the Tax Code implied very long depreciation period. For example, buildings were depreciated within the period from 60 to 120 years, and electronic means, for example, computers – from 15 years and more. These periods were not regulated by the enterprise but were the result of the calculation of depreciation. Depreciation charges were relatively small. Such policy prevented the replacement of the fixed production assets by the new, according to market requirements.

After the introduction of the Tax Code, the depreciation policy has changed. Now the enterprise itself chooses the depreciation period, and, on its basis calculates the depreciation. For example, now buildings can be depreciated in the period from 20 years, and computers – from 2 years. Now the enterprises in Ukraine choose the depreciation periods themselves.

The paper shows that existing in Ukraine rules of construction of the economic activity provide ample opportunities for owners and managers of the enterprises to build the depreciation processes, choose the most appropriate approach to the implementation of the depreciation policy for a specific situation, which corresponds to the activity objectives and development of the particular enterprise for each specific situation.

This paper shows the attractiveness of modern depreciation policy to the enterprises in Ukraine.

Keywords: depreciation policy, period of full depreciation, minimum useful lives.

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ASSESSMENT OF THE EFFECTIVENESS OF FREIGHT TRANSPORTATION BY ONE-TYPE TRANSPORT VEHICLES

page 11–14

Types of transport vehicles and the need for them are set on the basis of the study of in-plant freight traffic that is the volume of freight, transported for a certain period of time in a certain direction between the points of loading and unloading. Unstable freight flows, which change every day, are typical for most enterprises, so the need for transport vehicles is determined on the basis of their irregularity. In such conditions, it does not matter to customers how effectively transport vehicles or vehicle fleet as a whole will be used. On the other hand, from the point of view of a carrier, efficient use of vehicles is based on the organization and planning of the use of transport vehicles. Modern economic relations form a new approach to the formation of efficiency indicators, which is aimed at receiving profit in the long-term prospect. Therefore, the problem of assessing the effectiveness of freight transportation by transport vehicles is relevant for consideration.

The method for assessing the efficiency of freight transportation by one-type transport vehicles with the ability of hiring and use of the project approach using modeling, graphic-analytical, economic-mathematical methods was improved. The methods of distribution of freight, suitable for transportation by the one-type transport vehicles, between the own and hired transport vehicles in conditions of ensuring the fulfillment of treaty obligations to the customer gained further development. Indicators of transportation efficiency assessment were analyzed.

Keywords: one-type vehicles, carrier, project approach, outsourcing, efficiency indicators assessment.

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THE PROBLEM OF THE BUSINESS PORTFOLIO COMPOSING

page 14–17

In the article the main marketing features of business portfolio evaluation process were shown. It was emphasized, that market correlation between business portfolio components is required to be mentioned during its balance estimation. In case it was figured out, those components (strategic business units (SBU) and supporting market activities) need to be in business directions organized. One of the effective ways of solving those business challenges is the algorithm of finding and

forming balanced portfolio which was described in this article. To be successfully completed it should include the following input values: correlation matrix of SBU; the range within which the number of SBU in the portfolio changes; the final number of optimal business portfolios.

Keywords: portfolio, business direction, SBU, correlation, algorithm for building business portfolio.

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ESTIMATION OF RESULTS OF DIVERSIFICATION OF TRADE FLOWS IN THE ENTERPRISE

page 18–21

The paper considers the main components of the results, which the enterprise obtains introducing the strategy of diversification of trade flows into its activity. The purpose of the study is the formation and evaluation of the results of introduction of trade flow diversification in the enterprise. During the study, the methods of theoretical generalization, systematization and comparative analysis were applied, which allowed to determine and formulate the essence of such categories as «diversification of trade flows», «result». The methods of determining the results, with the use of which they can be assessed are presented in the paper. The proposed analysis allows to estimate both financial and non-financial results, which the enterprise obtains at the diversification of trade flows and to determine the efficiency and feasibility of such introduction. The research results can be used by the head of the enterprise for the evaluation of the efficiency of trade flow diversification and ensuring of stable operation of the enterprise. It is possible to make amendments and additions to the proposed methods of result evaluation, depending on the specifics of the enterprise activity. However, the main component of the analysis of results of trade flow diversification is the change of enterprise profits.

Keywords: result, diversification, trade flows, risk, project.

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WAYS OF ATTRACTING INVESTMENTS IN OBJECTS OF COMMUNITY PROPERTY OF UKRAINE

page 26–29

The current state of local and regional development is characterized by the lack of appropriate material, financial, personnel and other resource support, necessary to perform the tasks and powers of local government bodies. From year to year, local authorities have to work in conditions of limitation of their own financial resources and deep dependence on the state budget. Under such circumstances, the state must interfere, regulate and balance local budgets and each region has to look for its individual ways of replenishment of local budgets, depending on specific features of the region. The existing ways of attracting private investments to the objects of community property are considered in the paper, conditions of their introduction are analyzed. The comparative analysis of the use of public-private partnership and government procurement models for social facilities of community property was carried out. The advantages of the use of public-private partnership compared to the traditional scheme of private investment attraction were justified.

Based on the results of the conducted comparison of project implementation using the mechanisms of public-private partnership with the traditional form of the implementation of investment projects, it can be concluded on the optimality of use of the PPP scheme, which leads to the most efficient financial management, high quality of works and reduction of implementation time, and also to the use of optimal design technologies and construction solutions for the achievement of a balance between the high-quality infrastructure and project costs.

Keywords: community property, investment, public-private partnership (PPP), private investor.

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EVOLUTION OF TECHNOLOGIES AND EQUIPMENT FOR FEED MIXTURE PREPARATION — THE BASIS FOR THE RESEARCH OF ECONOMIC EFFICIENCY OF FEED PRODUCTION

page 21–25

At the beginning of 1930 in Poltava, the experimental feed mill was put into operation with a capacity of 65 tons/day. The technological methods were worked out, the technologies were studied, and equipment was tested on this mill. Much attention was paid to the laboratory and technical base — incoming control of raw materials, toxicity issues, devices for the express analysis of raw materials and finished products. In the middle of the XX century, an integrated approach to the rational animal feeding was formed, which is based on the interaction of three conditions: preparation of nutritiousness- and quality-balanced feed ingredients, animal feeding in the necessary amount and organization of simultaneous feed intake of animal. The study of the content of nutrients in feeds and their matching to the needs of animals showed that none of feed materials of plant origin contains the necessary set of nutrients, needed for normal vital activity of animals. These data preceded the scientific development and application of multi-component rations, which fully satisfy the need for nutrients, that is feed mixtures.

To study the efficiency of feed production, the evolution of technologies, from ancient technologies to modern mobile feed mills, was considered in the paper.

The periodization of technologies and technical means of feed mixtures preparation is given in the paper, which allows to determine the patterns of the evolution of scientific and technical thought, and to predict further development of mechanization of feed production in accordance with changing conditions and needs of society.

Keywords: feed mixtures, grain dryers, mobile feed mills, feed production, grain processing technology.

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TECHNICAL RE-EQUIPMENT OF THE MOLDING SHOP OF THE FOUNDRY BASED ON THE INTRODUCTION OF IMPULSE MOLDING

page 29–32

As the analysis of the state of foundry shops shows, one of the «bottlenecks» are molding shops, but the main problem in these shops is the wear of molding equipment. Therefore, the studies on the development of measures for the reconstruction of the molding equipment, considering it as a part of the technical re-equipment of the molding shop of the foundry, are relevant.

As a result of the conducted research on the issues of planning and organization of measures on technical re-equipment, providing the possibility of reducing the deadlines and rational allocation of resources in the process of technical re-equipment of the molding shop of the foundry, the activity network on the implementation of the complex of works on the technical re-equipment was built. The essence of technical re-equipment is the replacement of obsolete jolt-squeeze molding machines by modern impulse molding machines. It was found that the most important operations in carrying out the preparatory works are the reconstruction of the system of machine drives,

development of technological schemes of mounting, construction works on the preparation and mounting of drives, mounting of prefabricated elements of equipment, preparation for the mounting of the main technological equipment. The most important operations when carrying out mounting are operations of mounting of the frame of cylinders and pressing mechanism.

The application of the described solutions can be used in the process of technical re-equipment of molding shops of the foundry.

Keywords: technical re-equipment, foundry, impulse molding.

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MANAGEMENT SYSTEMS AND PROCESSES

CHARACTERISTICS OF THE CLASSIFICATION OF QUALITY MANAGEMENT COMPANIES WITH REQUIREMENTS OF INTERNATIONAL STANDARDS

page 33–35

This article refers to the field of quality management. An important task of a modern company is to find models of assessing ability of the quality management system to adapt quickly to the changing economic environment and the social environment. The main aim of this article is to review various types of approaches to the quality management. In general, the systems are diverse by classes; they differ in their structure, types of bonds and the level of control. Therefore, the Quality Management System is researched according to the classification of systems.

In this article the Quality Management System is evaluated according to the system and process approach.

Keywords: quality management system, international standards.

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SOFTWARE TOOLS OF TEACHER'S WORKING TIME OPTIMIZATION IN GRADING SYSTEM

page 36–37

The working time of teachers is becoming more intense, and its rational use is very important. The workload is increasing from year to year as a result of increased norms — a number of students per teacher, constant scientific and technological progress and, unfortunately, decreased training level of students at secondary schools. With the introduction of the Bologna system teachers also spend some time calculating the students' grading, while the duration of practical and laboratory classes remains unchanged. To optimize the use of working time a simple, easy to use and universal program for calculating the students' grading is proposed. The proposed program calculates the total number of points got for each subject, adds bonus points and, depending on the sum of points, determines the corresponding point in the ECTS.

Keywords: grading, optimization, programming, grading system, working time.

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INFORMATION SYSTEM OF DEFINITION OF ADAPTATION CAPABILITIES OF THE STUDENTS' ORGANISM

page 38–41

The creation of the information system of definition of adaptive capabilities of students is considered in the paper. The problems of studying the functional capabilities of an organism, features of adaptation of students and their psycho-emotional state are highlighted. The main objective of the study is the development of methods and systems for the collection, processing and analysis of the data, obtained using technical means, as well as the use of medical and psychological knowledge. The information analysis includes the integrated assessment of adaptation capabilities of the student's body, which involves the research of the overall variability by the spectral and temporal method, the dynamic component of the heart rate variability; the definition of the level of depression and anxiety and the estimation of distribution and switching of attention on the corresponding psychological tests.

The proposed system allows to obtain the qualitative assessment of the adaptation capabilities of the student's body taking into account the functional class and psycho-emotional state.

Keywords: information system, adaptation capabilities, heart rate variability, functional state.

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DEVELOPMENT OF THE DATABASE FOR INFORMATION SYSTEM OF DEFINITION OF THE CENTERS OF TOXICITY OF WATER ECOSYSTEMS

page 41–44

The paper considers the use of modern methods and tools for timely detection of the centers of toxicity formation in water bodies that is often associated with finding and processing of a set of various parameters, which are performed manually or using small programs that leads to the excess expenditure of time and information overload of specialists. The problem of the data processing automation or, at least, the manual handling complexity reduction, is also present during the biological monitoring in the zone of influence of potentially dangerous objects. For the solution of this problem, there is a need of creation of the corresponding specialized database for the information system of the definition of toxicity centers in water bodies, which provides complete independence of the data, the manipulation of which at the level of the control system language does not require the development of additional software and is not attached to the structure of the database.

Keywords: database, water ecosystem, information system, logical model.

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- spectrophotometer, user. The computer unit includes data input/output units, data processing unit, DB (database) and data analysis unit. One of the main units of the IS system is the data analysis unit, which consists of three parts: assessment of the influence of natural and anthropogenic factors on the concentration of heavy metals in plant products using the analysis of variance, determination of the concentration of heavy metals in plant food products using the method of discriminant functions and determination of the effect of air pollution on the microelements relations in ground vegetables using the unit for discrete simulation of dynamic systems. As a result of the IS system operation, the graphs of relations between microelements in potato tubers were obtained.

Keywords: information system, plant products, discrete simulation of dynamic systems, microelements.

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POLYNOMIAL COMPONENT PDC-ALGORITHM TASKS SOLVING THE SCHEDULING THEORY

page 47–51

INFORMATION SYSTEM FOR DETERMINING THE EFFECT OF AIR POLLUTION ON MICROELEMENTS RELATIONS IN VEGETABLES

page 44–46

The paper is devoted to the development of the information system for determining the influence of air pollution on the microelements relations in plant food (vegetables). The block diagram of the information system includes computer, interface,

This article discusses the usage of the operating shop scheduling in the production management. Some results of the investigation in the sphere are presented in the article. The problem of shop scheduling fulfillment over general due date with identical parallel devices is considered on purpose to maximize a starting moment of devices on condition that all tasks have not been detached. The main goal of the investigation is to determine the latest starting moment of tasks fulfillment with parallel devices over due date in permissible schedule.

The article observes the task properties of shop scheduling of tasks fulfillment over general due date with identical parallel devices. According to the method of construction for difficult problems of combinatorial optimization polynomial component is developed PDC-algorithm structure tasks solving. It has been proposed algorithm of initial schedule structure. It has been determined the set of transpositions that allows to improve in succession the significance of the criterion. This set transpositions form the basis of the developed algorithm tasks solving. The results of the investigation could be put into practice of operative shop scheduling of production.

Keywords: shop scheduling, schedule, parallel devices, PDC-algorithm, max, starting moment.

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