



# ECONOMICS AND MANAGEMENT OF ENTERPRISE

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## DEVELOPMENT OF DIAGNOSTICS OF ENTERPRISE IN PUBLIC E-PROCUREMENT SYSTEM IN TERMS OF LOGISTICS

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The content of «information and financial flows» concept as components of optimization processes in procurement is disclosed and conceptual bases of enterprise diagnostics in the system of public e-procurement on the basis of logistics are presented. The process of public e-procurement in the aspect of information and financial, information, financial logistics, document management, logistics of goods, services and works is analyzed. A system of indicators for the functioning of public e-procurement in the «information – resource – time» system is proposed on the basis of a logistics approach at the macro- and micro-level.

Using the developed indicator of effectiveness level of participation in public e-tendering procedures and the data of the analytical module of the ProZorro system, it is established that among the twenty enterprises-monopolists of the fuel and energy complex and light industry of Ukraine, the highest level (100 %) of the effectiveness of participation is observed in five of them.

The proposed approach to calculating the indicator of the level of participation effectiveness in public e-tendering procedures is recommended to be used by enterprises as a self-diagnostics in this direction, and also with the aim of improving the system of maintaining tender documents and the procedure for selecting the winners of procurement by state customers.

**Keywords:** public e-procurement, logistics, information and financial flows, «information – resource – time» system.

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#### **DEVELOPMENT OF APPROACH TO ANTICIPATORY RISK MANAGEMENT OF THE ENTERPRISE UNDER UNCERTAINTY CONDITIONS**

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The object of research is a risk management in the enterprise under uncertainty conditions.

In a period of rapid market transformation of risk management is one of the most important tasks for business entities. Problems of reducing the uncertainty of the external environment management, early diagnosis of risky situations, the adoption of adequate solutions to minimize the impact of threats and use opportunities for enterprise development are still relevant. An effective risk management system under uncertainty conditions becomes an important tool for ensuring the competitiveness and development of the enterprise. Despite certain achievements in the issues of studying risk management, it remains problematic to coordinate the interaction of enterprise risk management with the medium of enterprise operation. Authors propose to solve this problem by means of anticipatory management in the system of risk management of a modern enterprise.

It is found that the risk management should not be aimed at minimizing, but in optimizing the permissible risks and maintaining a balance between the stability of the business and

the level of riskiness of the situation. An integrated approach to the anticipatory risk management of the enterprise under uncertainty conditions is developed. This approach allows to maximize the effect of the interaction between risk management and enterprise management environment through early identification of potential events, predicting their future development and adoption of appropriate preventive measures to minimize the impact of threats and opportunities for enterprise development in the long term.

The theoretical value of the research is in development of methodical ensuring of effective risk management of the enterprise in modern conditions. Practical use of the developed approach to reduce the time limits, create an information base for development and sound management decisions, makes it possible to identify potential threats and opportunities before the date of their materialization with the aim of making appropriate preventive management measures. This allows to minimize the impact of threats and take advantage of opportunities for enterprise development. It is this approach to risk management that provides economic agents with competitive advantages in modern dynamic conditions of operation.

**Keywords:** anticipatory risk management, identification of weak signals, preventive measures, optimization of allowable risks.

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## **ENTERPRISES OF TELECOMMUNICATIONS IN UKRAINE: RESEARCH OF THE PRESENT STATE AND DIRECTIONS OF DEVELOPMENT**

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The article contains the results of a comprehensive study of the economic activity of telecommunications enterprises in Ukraine in 2015–2016 and the directions of its development in the conditions of the global information and communication market. As methods of research, economic, marketing and competitive analyzes, a system approach are chosen. It is found that by the end of 2016 telecommunications enterprises had achieved higher indicators, their total income increased by 12 % compared to 2015, a favorable trend in the market for improving the efficiency of economic activity of enterprises appeared; while revenues of the segment of Internet providers and other telecommunications companies from the provision of Internet services increased by 48.5 %, which indicates an effective solution to the problem of access to the Internet and use of its capabilities by Internet users in Ukraine.

The assessment of the state of the competitive environment and the level of monopolization of the mobile communications market and the telecommunications market in Ukraine as a whole is done by calculating the Herfindahl-Hirschman index. The mobile communication market is still quite concentrated, the competitive environment is poorly developed, and a moderately developed competitive environment has developed in the telecommunications market in Ukraine.

Directions of development of telecommunications in Ukraine correspond to global trends and consist in the fact that in the emerging global market of infocommunication services integrated into the cyberspace of the Internet, telecommunications enterprises can successfully perform communicative functions.

It is also revealed that the steady direction of development of the majority of telecommunications enterprises in Ukraine is the desire to increase profits through the production and supply of new Internet services and own infocommunication services to the market.

**Keywords:** infocommunications, cyberspace, competitive environment, communications, technology convergence, telecommunication enterprises.

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## INVESTIGATION OF METHODS OF COUNTERACTING CORPORATE FRAUDULENCE: ACCOUNTING-LEGAL APPROACHES TO THE IDENTIFICATION OF ABUSONMENT

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As the study shows, an urgent issue for businesses today is the problems of corporate fraud and the counteracting measures. Despite the continuous development of internal control and audit systems, business losses from fraud in enterprises are growing every year. The risks of fraud are growing in an inefficiently controlled environment and it is not enough to use standard audit methods to detect fraud. Therefore, it is vital to study the issues related to the organization of an effective system of countering fraud. Taking into account the existing experience and world experience in counteracting this negative phenomenon, a study is conducted to establish an internal security and anti-fraud system at the enterprise and it is proposed to create the Financial Investigation Agency at the enterprise itself, which includes services: information and analytical control, internal audit, financial investigations and psychological prevention of violations. This will streamline the work of the internal security service, create and implement control procedures, redistribute the powers between the units of the enterprise at different levels. The tables of abuse indicators and the structure of the library of typical schemes of abuse in the article allow to adapt to the work of new employees of the internal audit service, regardless of their experience, reduce the risks of key business processes and improve their effectiveness; they can be used to identify, rank and assess potential risks of fraud.

Research results show that one of the departments of fraudulent activities is the department of finance and accounting and one of the types of financial fraud is the falsification of financial statements, which is extremely difficult to identify and prevent, in addition to deliberate distortions, there are distortions that are the result of conflicts of professional judgment on the application of regulations and accounting regulations. The article examines the risks that can arise from fraudulent financial reporting, and the knowledge of which will counteract this type of fraud.

**Keywords:** corporate fraud, falsification of financial statements, fraud risk assessment, Financial Investigation Agency.

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### INTEGRATION ON EFFECTIVE MANAGEMENT OF INDUSTRIAL ENTERPRISES ON LEAN PRINCIPLES

page 28–33

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The article deals with the methods of managing an industrial enterprise in their interaction, taking into account the focus of the result within the introduction of the concept of lean production.

Based on the analysis and generalization of scientific developments, the set of the most recognized and actively introduced methods of lean production is established by the frequency of mentions by foreign and domestic specialists: SOP, Kanban, JIT, 5 S, VSM, Visual Management, TPM, SMED, Kaizen, Poka-Yoke, Jidoka (another name is autonoma), Heijuka, Andon, 5 W, Team work. The relevance of their separate introduction through the achievement of the result of practical use aimed at reducing costs/losses in the value flow; increase in the effectiveness of the use of limited resources, identification of the causes of inefficient work; justification and adoption of managerial decisions with a focus on satisfying the customer's needs for finished products are disclosed.

For long-term success it is advisable to consider the use of integration of methods of the lean production concept, which provides a targeted integrated approach to justification and the adoption of well-balanced management decisions aimed at obtaining a synergistic effect on a continuous basis. The combination of methods in various combinations for efficient control of production capacities is justified (5 S + + TPM + SMED, 5 S + TPM + SMED + Jidoka, 5 S + TPM + + SMED + SOP + JIT + Poka-Yoke), material flow (5 S + + SOP + JIT + VSM + Poka-Yoke, 5 S + JIT + Andon + Heijunka), document management and internal regulations (5 S + + SOP + VSM + Poka-Yoke, 5 S + SOP + Kaizen). The types of synergies (social, market, financial, economic, innovative, personnel, organizational) are justified as a result of strengthening the effect of individual methods in a different combination.

It is advisable to apply the results of research practically to solve the problems of managing an industrial enterprise for technological development, organizational effectiveness, and social responsibility.

**Keywords:** lean production, lean production method, integration of methods, synergy effect, industrial enterprise.

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#### RESEARCH OF SCIENTIFIC ACTIVITIES IN HIGHER EDUCATIONAL INSTITUTIONS: PLANNING, ORGANIZATION, CONTROL, REGULATION

page 33–38

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The analysis of the peculiarities of scientific activities in higher educational institutions of Ukraine, which belong to the sphere of management of the Ministry of Education and Science of Ukraine in the context of the main functions of management – planning, organization, control and regulation.

The relevance of research is determined by the functioning of higher education institutions in conditions (economic, legislative, regulatory), constantly changing, therefore the issue of scientific activity requires constant study and analysis in order to identify current problems and determine the prospects for further development.

As a result of the conducted research, some shortcomings in strategic planning are revealed in leading universities – leaders based on the results of the consolidated rating of universities in Ukraine. Positive experience in planning and organizing scientific activity is shown on the example of Lviv Polytechnic National University. Proposals on improving the effectiveness of scientific activity of universities are formulated.

Correctly chosen and clearly formulated strategy and perspective directions of scientific activity, ensuring effective organization, execution and control over all processes in the sphere of production of scientific activity, as well as their regulation enable universities to be competitive in the market of educational, scientific and scientific and technical services.

**Keywords:** higher educational institutions, scientific activity, planning, organization, control, regulation.

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### FUNCTIONING OF ENTREPRENEURIAL UNIVERSITIES AS SUBJECTS OF THE SYSTEM OF INTERNATIONAL KNOWLEDGE TRANSFER

page 38–42

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This article is devoted to the study of scientific thought about the functioning of entrepreneurial universities. This is the first step of a more deep study devoted to the adoption of the concept of the entrepreneurial university to the domestic conditions, which functions in the system of international knowledge transfer.

Structurally, this article consists of several logically related conditional sections. The first part of the study is devoted to the review of scientific literature on the functioning of the entrepreneurial university as a subject of the international knowledge transfer system. The author analyzes the main domestic and some foreign approaches to the definition of «entrepreneurial university», highlights its most significant features. Within the framework of the literary review, an international knowledge transfer as a system consisting of the educational services transfer and technology transfer has been analyzed. The concept of educational service and its main characteristics are studied. The main categories of customers of educational services of the university are determined. All of the above-mentioned elements of the international knowledge transfer are also considered in the context of the educational services market. In particular, the study examines the educational services market as a system of economic relations with its inherent characteristics. The content of innovation activity as an element of knowledge transfer of entrepreneurial universities is revealed.

According to the research results, the author concludes that there is no unity in the scientific literature and proposes the author's definition of entrepreneurial university as a higher educational institution which, through a combination of fundamental and practical knowledge, generates marketable products (educational, scientific, innovative) that can be commercialized both on the domestic and foreign markets of educational, scientific and technical services and innovations.

**Keywords:** entrepreneurial university, knowledge international transfer, market of educational services, foreign economic activity.

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**ECONOMIC CYBERNETICS**

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**DEVELOPMENT OF COMBINED METHOD FOR ANALYSIS OF FINANCIAL RISKS OF INVESTMENT PROJECT**

page 43–49

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In this article, the object of research is the methods of quantitative analysis of the financial risk of investment projects. Among the methods used in practice of this type, there is no universal method suitable for a comprehensive risk assessment of most investment projects in practice. Therefore, the problem of creating new or improving known methods of quantitative analysis of project risks is still relevant.

The authors of the article in their previous works developed a new method for assessing the risks of investment projects – an analysis of the financial stability of the project. One of the main drawbacks of this method is its determinism. In this article, the authors attempted to combine their method of analyzing the financial sustainability of the project with the scenario method. As a result of the combination, the two methods that make up the combination have become more universal. The method of estimating the margin of financial stability of the project has the ability to find the mathematical expectations of the margin for all project scenarios, and the scenario method now assesses not only the integral risk of the project as a whole, but also the project risks by its parameters. In addition, the scenario method has been able to find critical parameter values and their mathematical expectations. With the help of the new combined method of analysis of project risks, it is possible to build project ratings by descending risk and a matrix of risk and predictability of project factors. The projects with different structure of payments (from rental to arbitrary) are considered.

**Keywords:** scenario method, break-even and project acceptability margin, risk ratings of project parameters.

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