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## ANNOTATIONS OF THE ARTICLES

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### ROLE OF INTELLECTUAL HUMILITY IN MODERN PUBLIC DIALOGUE

*With the Internet expansion the axiological problems of values formation became epistemological tasks of management of intellectual communications. For increase in efficiency of interaction in the public sphere of modern democracy it is necessary to use types of harmonious combination between rational intersubjectivity of public dialogue and subjectivity of personal beliefs. One of such types is the intellectual humility understood as the individual and interpersonal installation, connected by objectiveness and tolerance to others, holding median position between extremes of arrogance and self-abasement, diffidence. Differences in judgments of character and value of humility are connected with other intellectual advantages, for example, intellectual courage, objectivity, intellectual honesty, justice, mercy, independence, persistence and practical wisdom. Cultivation of intellectual humility can promote more constructive participation in discussion and the solution of social and humanitarian problems, equalizing status of all subjects of the public sphere and removing their claims for possession of the universal truth.*

**Keywords:** public discussions, dialogue, intellectual humility, epistemological virtue.

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### DIFFERENTIATION OF THE NORTH REGIONS AT THE LEVEL OF FINANCIAL POTENTIAL

*The relevance of the researched problem is caused by the high importance of the sustainable development of economies of the territorial subjects in the Russian Federation belonged to the Far North regions. Their level of financial provision characterizes financial potential.*

*The purpose of article consists in the methodology development of regions differentiation on the level of financial potential and its application for grouping northern regions.*

*The methods applied to goal achievement are methods of the economical and statistical analysis and also the methods of ball assessment allowing to determine values of the elements, constituting financial potential and the cumulative financial potential for each region.*

*According to the received quantitative assessment of the financial potential, the grouping of northern territorial subjects in the Russian Federation is carried out and three groups of regions are allocated. The characteristic of regions entered each of three groups is given. The role and value of financial potential for providing regions with necessary financial resources, the role of stimulations of economy subjects to increase in financial flows, redistributions of resources between subjects of a financial system of the region is shown.*

*Materials of the article can form a basis of development of summary programs and strategies of development for the northern territories, to act as the basic information considered in case of implementation of these or those programs and projects, the choice of the most attractive regions from the point of view of the created financial potential.*

**Keywords:** financial potential, fiscal potential, potential of households, potential of economic entities, the potential of the financial and credit sphere, northern regions.

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**ECONOMIC EFFICIENCY OF THE ENTERPRISE: CONCEPT, METHODS OF DEFINITION, FEATURES OF INCREASE**

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*The urgency of the problem under investigation is conditioned by the fact that the fundamental task of each enterprise, operating in a market economy, regardless of the organizational and legal form, is the formation of a stable financial position and the enhancement of the efficiency of entrepreneurial activity. A high level of work efficiency guides the enterprise to the corresponding indicators of profit, quality, competitiveness, and hence the viability of the company in general.*

*The article is aimed at establishing the relationship between the indicators of the economic efficiency of the enterprise and its final financial results.*

*The leading approach to the research in this area is a systematic approach that allows to identify all aspects of the problem, to identify the main and essential, to determine the nature of the relationships between the properties and characteristics of the object.*

*In this article, the essence of the concept of "economic efficiency", the methods of its determination and the internal and external factors affecting its dynamics are examined. In the conditions of economic instability, as well as in relatively favorable periods, to increase the economic efficiency of the company requires a kind of push. Such a push can be a special program of anti-crisis management. This mechanism should be based on objective laws of the construction of the enterprise's production process, in this case it will not do harm, but will allow achieving the set results.*

*The materials of the article can be used in the practical activity of the enterprise, in the educational process, as well as in a research work on the problems of increasing the economic efficiency of the production process.*

**Keywords:** economic efficiency, crisis management, profitability, competitiveness, efficiency.

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**METHODICAL APPROACH TO THE ASSESSMENT OF ECONOMIC STABILITY OF THE OIL COMPANY**

*The purpose of the article consists in the development of the methodical approach of the economic stability assessment in the oil company, allowing to consider specific branch factors impact in oil branch. The object of the research is methods and mechanisms of the assessment of economic stability in the oil company. The system, graphic methods, methods of specification, analysis, comparison, group and other methods of scientific knowledge are applied. The algorithm of the economic stability assessment in the oil companies is described. It provides timely identification of various dangers, forecasting of their consequences, definition of collecting and providing information methods to the operating center, which makes the decision of further actions. Calculating the level of economic stability the integrated indicator method is used. Formation of an integrated indicator of economic stability of the company is made through standardization of single indicators of economic stability. On the example of the oil companies PJSC JSOC Bashneft, PJSC Gazprom Neft, PJSC Tatneft the experimental approbation of the offered approach is carried out, the assessment of economic stability of the oil companies is made, the level of their economic stability is determined, problems of ensuring the high level of economic stability are revealed and the complex of actions for increase in the level of their economic stability is offered.*

*The offered technique of the economic stability assessment based on the official reporting of the companies is characterized by availability and usability. Though it considers branch specifics of the oil complex, the offered technique of the economic stability assessment can be applied to the economic stability assessment of the enterprises in other industries and types of economic activity, but at necessary additions and changes. As a result of this technique approbation on the example of the oil companies PJSC JSOC Bashneft, PJSC Gazprom Neft, PJSC Tatneft, a high class of economic stability of the oil companies has been established. At the same time PJSC Gazprom Neft Company is more economically steady among the considered companies.*

**Keywords:** economic stability, integrated indicator of economic stability, scale of assessment of economic stability, class of economic stability, Oil Company.

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### **HISTORICAL METHOD IN THE ANALYSIS OF ECONOMIC REALITY**

*The urgency of the problem is due to the need to focus the attention of young scientists on the use of the historical method in the study of contemporary economic problems. The aim of the work is to study the merits and demerits of the historical method, directions of its use in economic science, its functions, methodological problems, and the essence of historical schools. The object of the research is the historical method as one of the oldest and tested methods in the economic science. Methods of analysis and synthesis, comparative analysis, induction and deduction were used as research methods. The significance of the studied method in the economic studies, the scope of its application, advantages and disadvantages, the grouping of historical facts, functions, and stages of use are shown. The problems of applying the historical method are revealed: the use of quantitative methodology in studies of economic processes and the cliometric approach, as well as the periodization of economic history and the determination of what the world economic history is. The question of the significance of the comparative historical method is singled out as one of the most universal and effective methods of cognition, reflected in such a section of economic science as economic comparativistics. Characteristics of historical schools - the German historical school and the contemporary Anglo-American school (D. North) are given. It is concluded that in economic researches and in the modern period, it is necessary to use the methodology of historical schools, without which it is impossible to know the past and present and to predict the future.*

**Keywords:** historical method, merits of the method, shortcomings of the method, historical facts, method functions, cliometrics, historical schools.

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### **ANALYSIS OF METHODOLOGICAL APPROACHES TO ASSESSMENT OF INTELLECTUAL POTENTIAL OF THE UNIVERSITY**

*The relevance of the research problem due to the fact that the intellectual potential of universities is a major factor in competitiveness and one of the main sources of increasing the intellectual capital in the region and the country as a whole.*

*The goal of the article lies in the study and analysis of methodological approaches to assessment of intellectual potential of universities.*

*Leading method to the study of this problem is the method of comparative analysis, allowing to reveal advantages and disadvantages of existing approaches to assessment of intellectual potential of universities.*

*The article gives a brief description of assessment methods of intellectual potential; the comparative analysis of the most interesting methods assessing the intellectual potential of universities presented in the literature is carried. The results of assessment of universities intellectual potential in the Republic of Bashkortostan on the basis of the considered methods are given. According to the results of the assessment, the advantages and disadvantages of the used methods are revealed. The conclusion about the necessity of application of the relative indicators system for characterizing the intellectual capacity on various grounds is drawn.*

*The article may be useful for studying the problems of intellectual potential assessment of socio-economic systems.*

**Keywords:** intellectual capital, intellectual potential, higher education institutions, assessment of intellectual potential.

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### SYSTEM AND METHODS OF PERSONNEL MANAGEMENT

*The article considers the personnel management system at the enterprise. The purpose of the study is the timely provision of personnel, their competent functional use, and the development of professional qualities of employees. The relevance of the research is related to the fact that the staff acts as the aggregate of all the human*

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resources available in the enterprise. To achieve this goal, general scientific (analysis and synthesis), monographic and abstract-logical methods were used. As a result, we can name the study of methods, with the use of which personnel management takes place. The effectiveness of any organization depends on the staffing capacity of the organization and it is one of the most important factors in the functioning and development of organizations in modern conditions.

**Keywords:** analysis, method, personnel management system, personnel marketing, management.

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#### GNOSEOLOGY BASIS OF TASTE IN THE AESTHETICS OF FRENCH ENLIGHTENMENT

*The article considers the epistemological method applying to the taste problem in the French Enlightenment. A new reading of the concept of aesthetic taste is relevant today. It has an impact on the formation of human's personality. The aim of the study is to reveal the basics of good taste and its notion in the age of the French Enlightenment.*

*The results of the research showed that the French thinkers of the Enlightenment, guided by the principles of rationalism and empiricism in philosophy, pursued the search for the concept of taste. Therefore, in the «Encyclopedia» by Dydoro, at which worked Montesquieu, Voltaire, D'Alembert, the origins of the concept of aesthetic taste, its relationship with the world of beauty, reason and feelings are shown. Philosophers also emphasize the power of art, through which aesthetic taste is brought up. In connection with this, there is a gnoseological interpretation of the problem of aesthetic taste by the French thinkers in the Enlightenment.*

**Keywords:** aesthetic taste, the French Enlightenment, gnoseology, Dydoro, Montesquieu, Voltaire, D'Alembert.

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**APPLIED CHARACTER OF EPISTEMOLOGICAL METHODOLOGY (ON THE EXAMPLE OF THE RUSSIAN FEDERAL CUSTOMS SERVICE)**

*The modern economy develops extremely fast. As Jeff Bezos, the head and the founder of the Amazon Internet company, has said: «If something can increase or decrease in the price for 2300 percent in one hour, decisions need to be taken quickly» [8]. Therefore, the authorities of modern state have to solve the main administrative problem of competent upgrading of regulative mechanisms in economic relations.*

*Customs administration in Russia is mostly in the general trend of post-industrial economy. The Federal Customs Service of Russia implies innovative enforcement technologies of the conflict resolution for the purpose of counteracting the illicit trade and illegal movement of goods through customs border. These technologies are most highly developed today in our country from all instruments of conflict resolution.*

*The article shows correlations between methodical provisions offered by the author within epistemological approach to a conflict phenomenon and practical force actions of the Russian customs authorities for resolution of conflicts in the sphere of the foreign trade activities.*

*The purpose of the author is to show methodological universality of epistemology for carrying out the scientific analysis of practical aspects in social or economic life.*

**Keywords:** *episteme, postmodern, customs administration, foreign trade, technologies of conflict resolution.*

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## VALUABLE ASPECT OF MATERIAL BEING FORMATION

*The article is devoted to philosophical reflection on the formal aspect of the value relationship. We analyze the relationship between the categories of existence, entity and thinking. The praxeological model of their union is offered. The thesis is substantiated that worthiness is fundamental ontological characteristic of being that exists structurally as a result of the realization of the value relationship and the handling of things. Inside the existent world, entity becomes accessible for action. On the basis of the analysis, it is established that material being exists as unconscious being, as potential being, it does not have a form defined by consciousness. Entity is truth in the mode of necessity; it is material in the mode of possibility (or ability). The main advantage of this model is openness to dialogue and communication and accounting of the essential needs of the activity's subject, the ability to self-organization.*

**Keywords:** being, matter, entity, value, truth, practice.

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## QUANTUM LEAP IN SPEED OF DEVELOPMENT: NEW MENTALITY

*This paper formulates a philosophical notion of the «new reality» - the post-stability era, due to the shocking speed of the development of the digital civilization, where the fundamental changes in the technological infrastructure and the changes that they caused in the life of the society began to occur repeatedly throughout the life of one generation. In the era of «normal being» radical changes in the technological environment and the transformations caused by them in the life of society either did not happen at all, or were extended for several generations, providing an opportunity for relatively comfortable adaptation.*

*In this way, the qualitative leap in the rate of development that has occurred is evident when this speed is related to human life. As a result, almost complete unpredictability of the transformation in the social environment and technological infrastructure breaks down the entire established picture of the world along with the notion of the place and role of man in this world.*

*Mankind, having made the transition to the «new reality», stands on the verge of a revolutionary transformation of the paradigm of thinking, which requires both a new man and a new concept of his destiny.*

**Keywords:** social philosophy, scientific and technical progress, horizons of planning, info-communication technologies, speed of digital civilization development, worldview, human predestination.

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**THE AUTOMATED DESIGN OF THE EXTRUSIVE EQUIPMENT WITH INTELLECTUAL SYSTEMS APPLICATION**

*The subject of the research is the process of creation of CAD screw extruders. The aim is to increase the labor productivity of the design engineer.*

*The methods of mathematical modeling, the theory of complex systems, methods of artificial intelligence, methods of adaptive search, the theory of pattern recognition, the theory of object-oriented design, the theory of graphs were used.*

*The integrated environment of CAD screw extruders has the practical significance. It allows to create extruder structures; to automate the adjustment of geometric parameters and the preparation of data for structural analysis; to conduct simulation of the extrusion process; to optimize designs and technological modes; to manage extruder design data, extrusion process and simulation results.*

*The developed technique allows to organize interaction of CAD components on the basis of their classification, integration and configuration. The configuration of components based on the methods of artificial intelligence reduces the laboriousness of the process of screw extruders designing, and expands the possibilities of searching for new and improving existing structures.*

**Keywords:** CAD, extruder, software system, mathematical model, intelligent systems, genetic algorithm.

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### **THE PARAMETERS OF MATHEMATICAL MODELS FOR PREDICTING THE INFORMATION STORAGES RELIABILITY IN LARGE DATA CENTERS**

*In large data-centers it is statistically possible to establish the average number of failing information storages per day, but it is impossible to predict which of them will break. It is proposed on the basis of several parameters of reliability to formulate some mathematical models allowing to predict failures. The aim of the study is the justification of the choice of parameters suitable for prediction models of information storages reliability. The object of the study is one of the world's largest data centers of the Backblaze Company. The subject of the research is the reliability of applied information storages on hard drives. The method of the research is the analysis of drives SMART data listed on the company website. As a result, it is obtained that the most suitable for mathematical models predicting the reliability of magnetic hard drives and solid-state information storages are parameters 1, 5 and 197. Parameter 1 Raw read error rate, which displays the rate of change of the measured data, is proposed to use as indicator: if the value is above zero that is the danger of drive failure. For parameter 5 Reallocated sectors count it is typical the step changes of values. The best mathematical prediction model in such cases is a linear extrapolation. For parameter 197 Current pending sector count the nature of the change is much more complicated: there are speed jumps, flat areas and sharp highs, sharp lows. The most suitable way for prediction such dependences is the neural network with general regression. The prospect of further research is to implement mathematical models in the form of multi-parameter prediction program of information storages reliability for large data centers.*

**Keywords:** information, storage, hard disk, reliability, prediction, parameter.

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**MULTIDIMENSIONAL INFORMATION SYSTEM OF ROADSIDE TERRITORIES STATE**

*The parameters that characterize the traffic flows objectively have a high variability even over the relatively small time intervals. It leads to significant errors in the determination of their values, using methods of modeling and forecasting. At the same time, the reliable and timely information about the state of the transport stream is necessary for the load evaluation on the ecological complexes of roadside territories and for development of the timely solutions regulating this flow. For this reason, constant monitoring of the values of these parameters, carried out in automatic mode and allowing timely to identify and resolve environmental problems and traffic difficulties, is an important and urgent task. The purpose of this article is to develop the structure of a multidimensional information system that provides efficient support for road management. The main research method was a systematic analysis of heterogeneous and different-level information, characterizing traffic flows and the condition of the roadside areas. As a result the main functions of the information system are systematized, the basic elements of the system realizing them are defined and characterized. We defined the main groups of parameters taken into account: environmental, meteorological, data on the structure of the transport stream. The expediency of using technologies of Earth remote sensing to obtain data about the condition of the roadside areas is proved.*

**Keywords:** road transport systems management, information systems, geo-information technology, the roadside areas.

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### **MATHEMATICAL MODEL OF RAW GRAIN CRUSHING**

*The actual task of the technological processes of grinding is the reduction of the specific energy consumption (energy intensity). It is the most important for crushers, mills, etc., for machines that imply impact on the material being processed. One of the ways to solve this problem is the appropriate preparation of raw materials, in particular, the pretreatment with cold.*

*The research goal is to develop a mathematical model with the raw grain grinding before the grinding process. The creation of a mathematical model begins with the development of a general methodology of investigation of the deep freezing process, as well as the methodology of its application. Then, the theoretical models are created that serve to determine the internal parameters of the process, as well as the material processing features during the grinding. The final stage is the development of recommendations for the implementation of grinding in the conditions of feed mill industry enterprises.*

*It is concluded that freezing leads to a change in the coefficient of hydraulic resistance to the motion of the blade in the air-vortex layer and in the air-product layer; the coefficient of hydraulic resistance of the shredder*

body to the rotation of the air-product layer and, as a consequence, to the change in the power mixing the air-product layer.

**Keywords:** grinding, energy intensity, grain raw materials, technological process, capacity, feed mill industry, mathematical model, resource saving.

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