# **ANNOTATIONS OF THE ARTICLES**

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# DYSFUNCTIONS OF STATE PROPERTY MANAGEMENT IN THE SPHERE OF ECOSYSTEM EXPLOITATION

The paper analyzes control process of state property in the field of environmental management. Dysfunctions of state management are described on example of control of subsoil and forest exploitation. Its connection with shortcomings and omissions of economic legislation which doesn't insure legal protection of state-owned property is argued. The paper shows that quality improvement of state control in subsoil and forest exploitation can give an impetus to economic development by means of existing production factors. Special attention is paid to environmental safety of economic activity. It is proposed to improve the licensing process of subsoil and forest resources exploitation.

*Keywords:* state property, natural resources, environmental protection, economic legislation, state regulation, economic efficiency, management, subsoil users, licensing.

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# TRADITIONAL AND MODERN APPROACHES TO DEFINITION OF SOCIAL HOUSING

The paper highlights traditional and modern approaches to definition of social housing concept for a number of distinctive features: property owner, state role, granting form, rent, qualitative characteristics and tenant's category. It is noted that the traditional approach remains the main way to solve the housing problem for low-income and needy citizens in Russia. The authors proved that the modern approach is consistent with the current stage of social policy in Russian Federation by means of housing facilities formation intended for social needs, where housing can be provided by open-end contracts of social rent or fixed-term renting contracts for needy citizens, including address differentiated subsidies. The fundamental characteristics of social housing as well as its definition are presented.

Keywords: social housing, housing facilities used for social needs, rent, subsidy.

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# FINANCING INNOVATIVE ACTIVITY OF SMALL AND MEDIUM SIZE ENTERPRISES IN TERMS OF FACTORING

The paper notes that the relevance of SME development in Russia claims attention to ensure its funding. The authors identified contemporary issues of innovation financing of small and medium enterprises, proposed legislative solutions and made assumptions on its effectiveness.

Based on systematic approach to the analysis of factoring development, the authors identified positive characteristics of the tool and the reasons why it is not so accepted among small and medium enterprises nowadays. Companies will be able to optimize their payments schedule using factoring as a method of SME innovation

financing, what will increase the financial stability in the conditions of bank loans impossibility. These findings may be useful for financial managers of small and medium-sized enterprises, as well as factoring companies wishing to expand its customer base.

*Keywords:* factoring, assignment of claim, financing, innovation, innovative activity, small and medium size enterprises (SME).

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# POTENTIAL OF HIGH-TECHNOLOGY INNOVATION IN GLOBAL ECONOMY

The paper analyzes parameters and the basic tendencies of high technology development in the global economy-development specifics of such high-tech industries as biotechnology, computer technology and software. The presented findings are based on the own calculations, using appropriate data analysis methods. The analysis of innovation indicators of the Russian economy includes share of advanced technology developed in Russia, state expenditure on research and development, number of personnel engaged in R&D and many other factors. On the basis of this analysis, the author reveals the role and place of Russia in the development of high-tech industries. The innovative development forecast of the countries – high tech leaders, catching-up developers, as well as the Russian economy is represented in the paper.

*Keywords:* high technology, innovation, innovative development, competitive advantage, state innovation policy.

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# MONITORING METHOD OF SOCIO-ECONOMIC ENVIRONMENT IN SERVICE AREA OF AGRICULTURAL COSUMER CREDIT COOPERATIVES (ACCC)

The paper describes the issue of service availability of agricultural consumer credit cooperatives for agricultural producers. Theoretical and practical aspects for ACCC development path - expanding the service area are considered. The authors reveal the main components of ACCC service area in depth - territorial parameters; size and composition; production parameters of existing and potential members of the cooperative; volume of services. It was found that economic indicators of dynamics for services provided by the cooperative are directly dependent on the rest of the objects considered above the service area.

The authors developed and tested methodology for monitoring the territorial and industrial components of ACCC service area, which includes study of the territorial placement of rural population and economic facilities, the level of land-use and availability of basic cattle stock. Its goal orientation is to plan the most suitable localities for the opening of ACCC representative offices and to determine the level of need in cooperative loans.

*Keywords:* credit cooperation, agricultural consumer credit cooperative, service area of ACCC, ACCC representative office, loan services.

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# DECISION SUPPORT SYSTEMS IN MANAGEMENT OF INTELLECTUAL POTENTIAL OF SOCIO-ECONOMIC SYSTEMS

The mission of up-to-date university – is reproduction of intellectual resources and intellectual potential. A variety of strategies for intellectual potential management of the university are not limited to development of staff competences by corporate training and organizational structure optimization of educational institutions, considering the characteristics of information exchange with the external environment. These strategies offer a wide range of measures to improve the process of accumulation, updating and dissemination of knowledge. However, it requires effective tools for performance monitoring of implemented strategies in the context of the achievement of university intellectual endowments (endowments coefficients of intellectual assets, intellectual products, etc.), the level of its intellectual potential (indicators of intellectual potential of the university employees, intellectual supply, intellectual R&D, intelligent data base and other indicators), as well as assessing the relevance of knowledge in order to update it to a new up-to-date level.

The research objectives are to analyze the decision support systems as a means to manage the intellectual potential of the university, to develop a theoretical model of the considered business process and its information and analytical support.

The main methods are: systematic approach based on the general scientific methods of theoretical and empirical studies, including comparison, analysis, synthesis, simulation; nature-aligned approach that the management of socio- economic systems is based on the principles of adaptability, advanced development, ensuring equal-quality systems, motivation disclosure and updating of internal capacity, maximum utilization of environment capacity, interconnection of control and managed systems.

The result of the study is a description of managing methodology for process of intellectual potential increasing of the university based on decision support systems, as well as algorithms and instrumental analytical support for its implementation.

Keywords: management, socio-economic system, university, higher education, decision support systems.

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#### **INNOVATIVE STRATEGY OF BUSINESS DEVELOPMENT: CONCEPT AND DEFINITIONS**

The relevance of the issue is caused by terminology confusion: a number of papers provide the concept of *«strategy of innovative development», while the others define it as «innovative strategy of development». The* 

paper's objective is to define the concept of «innovative strategy of business development».

Here the author compares and presents the combined concepts of such definitions as «company», «corporation», «organization», «enterprise», «business» and introduces the term «business organization» by presenting the own definition.

As a result the author concludes that concepts of «strategy of innovative development» and «innovative strategy of development» are different. And when it comes to business and organizations the concept of «innovation strategy of development» is used.

The paper's outcome may be useful for further research of development strategies of business organizations and its classification.

*Keywords:* innovation, economic development, strategy, innovative way of development, business, innovative strategy of business development, author's classification, business organization.

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# DEVELOPMENT OF POULTRY FARMING AS GROWTH FACTOR OF FOOD SAFETY

The paper's purpose is the structural and dynamic analysis of regional poultry farming using the example of Orenburg Region as a large agro-industrial territory. This farming role in poultry and eggs self-production is explored for the territory, as well as its level is determined. The paper shows that production of such food is generally performed at poultry and specialized farms on the industrial basis. Among them CJSC «Uralskiy Broyler», large vertically integrated enterprise, has the leading position at the regional poultry market. The possibility of its functioning according to the model of an innovative firm is proved. Development trends of this agricultural holding, focused on competitiveness increasing as a unified production system, are determined. The authors argued that it is necessary to use operational and strategic controlling types for increasing controllability, costs accounting and transparency of production processes, besides, cancellation of non-basic work operations based on outsourcing will increase efficiency of the key activity.

Keywords: industrial poultry farming, region, model of innovative firm, development trends.

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#### ROLE AND SYSTEM ELEMENTS OF INNOVATIVE ACTIVITIES IDEOLOGY

Innovative activity of individuals assumes constant circulation of ideas in the society. The ideas, united in a system (ideology), allow influencing people consciousness, mobilizing them for innovative targets achievment by a certain translation mechanisms. Getting best results from mobilization process is impossible without complex knowledge about ideology's functioning. In this regard the purpose of this paper is studying the theoretical aspects of innovative activity ideology. Within this paper the authors reveal problems in acceptance process of an innovative idea by the society on the basis of rationality's principles, thereby, proving necessity of ideology implication as an administrative tool in innovative activity implementation. The paper describes the role and functions - explaining, depressing, motivational and legitimating - of innovative ideology in details. The authors explain how the main ideological functions correspond to ideology of innovations. The detailed system analysis of innovations ideology is conducted; according to the analysis results there is an identification of the main subjects and objects (resources) of such ideology: subjects-teachers, subjects-administrators, unprivileged subjects, project resources, loyalty resource. **Keywords:** ideology of innovative activity, subjects of ideology, functions of ideology.

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## DEVELOPMENT OF INNOVATIVE ENTREPRENEURSHIP IN SVERDLOVSK REGION

Enterprises innovative development plays a key role in the modern conditions, as Russia has currently identified shift vector of economic development model nowadays, since model of raw materials export became ineffective. It's hard to say what will be the new model, but it is likely to be focused on investment-intensive growth and innovative development of the country, based on developing of new high tech field. The paper describes the main features of innovative entrepreneurship's development in Sverdlovsk Region for 2010–2015. The analysis of statistical indicators characterizing trends in the regional enterprises development is performed, as well as innovative activity's dynamics of enterprises is considered. The structure of innovation types of small business is studied; the part of Ural Federal District and Sverdlovsk Region is presented in the volume of innovative products. The factors obstructing the innovation activity of business are revealed. The main priority directions of innovation development are presented for the region.

*Keywords:* innovation, innovation-active enterprises, investments, small business, innovation of industrial sector, industrial structure.

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# IDENTIFYING REGULARITIES OF LABOR MARKET DEVELOPMENT IN ORENBURG REGION

The paper's actuality is connected with the present situation characterized by gap enlargement between need of Orenburg regional economy in labor resources and what the labor market can offer for today. The work's purpose is assessment of development regularities at the regional labor market. The object of this research is the labor market of Orenburg Region. Tabular, graphical and coefficient methods were used for the study purposes. The authors used the mentioned methods to official statistical data and got the following results: the employment rate in Orenburg Region is unsteady and sensitive to external shocks; change regularities in the structure of employed and jobless persons by the key directions are revealed; underperformance of employment services is identified. The paper's materials can be useful for regional executive bodies by forming strategy of labor market complex development in compliance of the labor supply with its demand.

Keywords: labor market, employment, unemployment, dynamics, structure, regularities of development.

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## FACTORS AND PROSPECTS OF CONSUMER ECONOMY GROWTH

The paper deals with the state of modern economy in the terms of consumption, as well as explores the factors reflecting this situation best and capable to improve the future economy. The author describes processes in global consumer economy and its prospects. Assumption on tendency to benefits individualization, strengthening of information role, various interactions of people, business and communities is postulated as the main hypothesis.

The author proposed to use the «consumer economy» concept as economical aspect of consumer society, as well as «information benefit» - advantage without obvious physical form. Growth of consumer economy is a positive forecasting, since transition from hyper-consumption to more constructive economic behavior is supposed regarding creation of new information products, new trade and business forms of management, as well as desire of each person to self-identification.

*Keywords:* economy of consumption, informational benefit, globalization, consumer behavior, individualization, cooperative processes, *E*-commerce.

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# MODELLING INFLUENCE OF ECONOMIC GROWTH ON SIZE OF FINANCIAL SECTOR

The paper studies the mutual influence of economic growth and financial sector's size in Russian Federation and globally. The authors have developed a scheme for such study based on extensive use of mathematical tools. As the indicators that can fully reflect economic growth and financial sector's size do not exist, the study is based on aggregate variables. The further analysis and modeling was carried out according to these latent indicators interpreted as «Economic downturn» and «Financial instability». Application of FAVAR and VECM models allowed asserting that there is no impact of economic downturn on financial instability what can be explained by the fact that crises of the past decades had a financial reason.

The authors took data of 75 countries worldwide for 2005-2013 to explore the mutual impact of economic growth and financial sector's size at the global level. The analysis allowed revealing the spatial and temporal data heterogeneity what led to the use of regression models for panel data. Regression models were based both on aggregated and initial indicators. It is shown that economic growth's indicators around the world have an impact on indicators of financial sector.

Keywords: FAVAR, VECM, financial sector, economic growth.

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# ORGANIZATIONAL AND SUBSTANTIAL ASPECTS OF INTERNAL CONTROL FOR ACCOUNTING PURPOSES

The author analyzes historical aspect of «internal control» concept as it is reflected in national legislative acts with emphasis on legislation in the field of accounting. The definition of «internal control for accounting purposes» is formulated. It is proposed to consider internal control as support for accounting and taxation processes.

Some issues managed by law reflecting the concept, objectives and the object of internal control are considered and commented. The particular attention is paid to the facts of economic life as a subject of internal control.

The paper gives examples of economic facts, so that it is proved that not all of them affect financial condition of an economic entity, therefore they form the object for internal control. Conclusions about contradiction in the norms of legal practice considering understanding of internal control are presented.

*Keywords:* internal control, internal control system, organization of internal control, object of internal control, economic facts.

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# WORDS OF MYTH AS A TOOL FOR EXPRESSION OF SUBJECTIVE AND NATIONAL SPIRIT

Understanding the human mind nature involves an appeal to the various aspects of its manifestation, including the myth and myth-making. Comprehension of myth and myth-making phenomenon is largely determined by understanding the nature of language. Basic paradigms in language understanding are the language as an instrument of thought and language as a substance, which has an independent existence. In this regard, it's possible to formulate the paper's purpose – analysis of some concepts revealing the myth essence through the specifics' understanding of the words of myth. The author refers to the point of view of W. von Humboldt, which determines the language as a living unity, as a product of the national spirit.

The Russian linguists - representatives of the mythological school - explain the myth specifics and myth genesis basing on Humboldt's concept. The analysis of different opinions about the specifics of the myth language leads to the following conclusions: myth – an expression of the national spirit, the myth semantic content is reduced to the reasons and factors reflected in the language; myth - unconscious expression of people's ideas; the myth metaphor – the correlation result of human spirit and nature's forces; mythology – the whole spiritual life of a man; word of myth – it is a symbol, semantic content, which has unlimited potentialities of meaning

Keywords: myth, language, spirit, myth-making, word of myth.

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# MILITARY SERVICE: CONCEPT ESTABLISHING

The author gives his representation of «military service» concept analyzing the results of military conflicts occurred in the recent decades, which show the regularity for enlargement of tasks, solved by armed forces; and also the author considers various points of view to the problems of war and military service. The interrelation of military science with philosophy playing the determining role in its formation is observed. The attention is paid to the fact that the army is inseparably connected with society, state and political authority, evolving simultaneously.

The author examines interrelation of military service and military science concerning the practice of military building, studies the «war» and «peace» phenomena, as well as emphasizes a change of economic and moral circumstances affecting military servicemen. The military service became not only a profession, but the mission for the modern people consecrated their life to the service of the homeland. In this case the officers experience the complex of relations (frequently negative), formed in the public opinion and fixed in the social mind.

The paper indicates that readiness for homeland defense is an integral system, stimulating the sphere of military activity of a person; that the readiness is a degree of preparedness to this activity. The army necessity is explained by the fact that, firstly, the state is the main consumer of military services for the purposes of war. Secondly, the army is defined as a tool of the state, intended for conducting its policy.

Keywords: state, armed forces, war, military service, military science, military building.

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## SOCIO-PHILOSOPHICAL PHENOMENON OF «JUSTICE» CONCEPT

The paper considers understanding's problem of social justice in line with socio-philosophical knowledge. The interest to social justice interpretation is stipulated by searching for the optimal model of social welfare state that meets requirements of the modern society. Three major paradigms of justice are analyzed: giving, distributive, and exchange. Description of contemporary foreign concepts of social justice is presented. The modern theories of social justice are primarily built on the concept of individuals' freedom, which is central for most of these concepts. The author points out that the main idea for fair public relations and harmony is development and phased implementation of social policy, corresponding to the economic opportunities, cultural traditions and social mentality. The data from nation-wide surveys reflecting opinion of Russians on question of social justice definition is presented.

Keywords: social justice, society, social inequality, social welfare state, liberal theory, solidarity.

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## ISSUE OF IDEOLOGICAL PLURALISM OVERCOMING IN MODERN RUSSIAN SOCIETY

The paper is devoted to paradoxical situation of ideological pluralism in modern Russian society. The author considers it as paradoxical due to lack of single ideology, crisis of movement and development of society towards positive future. The social and cultural sphere of public life is the starting point determining ideological pluralism. Similarities of «the functional» of socio-cultural sphere and ideology are established. Content of cultural products creating certain values of modern people by information impact is specified. As a result, dependence of ideological pluralism on external cultures is explored in the national society. The author considers that pluralism loosens and disintegrates the Russian society. The nation-wide ideology is the mechanism which ensures society integration. The conclusion outlines the ways of ideological pluralism overcoming through creation of universal ideology and directions of future study.

**Keywords:** ideology, ideological pluralism, social transformations, social and cultural sphere, universal ideology.

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## PROBLEM OF IDEAL BEING IN ONTICAL FUNDAMENT OF SOCIAL REALITY

The paper identifies the ontologic role of ideas in historical reality. The author analyzes existence forms and ways of past social reality. It is shown that the form of ideas, knowledge and representations is one of existence

forms of past social reality. It is proved that the historical reality is a complex multilayered reality. It is formed by three spheres of being: being of physical nature, being of consciousness and ideas, being of society.

Using historical, genetic and hermeneutical methods the author reveals constituting role of ideas in the social reality. Solution includes consideration and analysis of ontological structure of historical reality, detection of characteristics and living conditions of its spheres, its interconnections and ways of existence. It is shown that spiritual components of historical reality exist as a form and text content. The paper proves that the ideas making content of the historical text are unchangeable and, so, indestructible components of the most past reality, which have reached our times by the text. The author comes to a conclusion that public and scientific ideas carry out the constituting role in society.

Keywords: history, reality, ontology, past, ideas, time.

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# IMPLEMENTATION OF DESCRIPTION LOGICS FORMALISM FOR DETECTING SEMANTIC CONFLICTS OF ENTITY-RELATIONSHIP CONCEPTUAL DIAGRAMS

The paper's aim includes method developing for implementation of description logics formalism, which would allow automating the semantic conflicts detecting of entity-relationship conceptual diagrams of relational databases during its integration. The paper consists of three parts: introduction, the body and conclusion. The introduction presents a problem definition that has to be solved in this paper. The body proposes an ontological model of conceptual domain objects' representation and a model for merging ontology of conceptual domain objects in terms of description logics, developed to solve the problem defined in the introduction. Moreover, the methods part presents an experimental evaluation of the developed models. The conclusion presents the output and plans for the future study.

*Keywords:* simulation modeling, description logic, verification, data integration, ontology, semantic web, relational database.

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# SELECTION OF OPTIMAL PARAMETERS FOR TRAFFIC INTENSITY FORECASTING

One of the factors influencing the standard value of road surface's illumination is the traffic intensity on this road section. Inasmuch the traffic intensity is a random value and can be presented in the form of time series; the author proposed to apply the forecasting of traffic intensity in order to improve the energy efficiency of lighting's control systems.

This paper's purpose is to select the optimal prediction parameters (prediction interval, prediction depth, prediction horizon) for determining the optimal current level of illumination intensity on the road section considering the requirements of normative documents. The artificial neural networks were implemented as a forecasting tool. The choice of this mathematical tool is determined by its simplicity and ability of neural networks to generalize large amounts of data identifying implicit dependencies. The value of error presenting the percentage of erroneous forecasts is proposed as a verification criterion. As a result of the experiment the author found out the following optimal values: prediction interval of 10 minutes, prediction depth of 24 hours, prediction horizon – 1. The percentage of erroneous forecasts for these forecasting parameters was 4,051 what corresponds to the high-level forecasting.

Keywords: neural network forecasting, traffic intensity, illumination control.

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# MATHEMATICAL MODEL FOR ASSESMENT OF SURFACE AIR POLLUTION BY TRAFFIC FLOW ON INTRA-URBAN CROSSROADS

The authors analyze different approaches to quantify surface air pollution by harmful substances (HS) of traffic flow in urban atmosphere. The paper proposes considering not only cars exhaust gas, but also wear-products of car components performing environmental monitoring of traffic flow. The need for incorporating traffic parameters in assessing the extent of urban atmospheric pollution is presented. The changing principles of HS mass on transport flow parameters are determined. The authors have developed a semi-empirical static model of air pollution on crossroads by traffic considering car wear products, as well as climate conditions, scattering effect and recycling. The developed model allows determining the main environmental risk of traffic HS, and manage traffic flow parameters for prediction of HS concentrations that may accumulate in the surface layer of motor roads.

*Keywords:* the mathematical model, the motor transport streams, the motor vehicle, the harmful emissions, the environmental monitoring, the exhaust gases, the tires, the brake pads.

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# EFFICIENCY EVALUATION OF ROAD ACCIDENT REGISTRATION BY SWOT-ANALYSIS

The relevance of the researched problem is determined by existence of traffic jams caused by variety of insignificant road accidents (RTA). The majority can't document these accidents by themselves. The purpose of this paper is to conduct detail analysis of different variants of RTA registration by its participants as well as traffic officers and accident commissioners' service. The leading approach to the study this problem is SWOT-analysis permitting to represent visually the main factors of successful development for accident commissioners. These factors include complete meet of the city needs for RTA documentation, minimizing time for RTA management, streamlining of insurance companies in terms of compulsory third party liability insurance, collection and analysis of statistical information on the occured accidents, etc. The paper can be useful for regulation and rationing of accident commissioners service and optimization of their interaction with Police and insurance companies.

Keywords: traffic safety, road accident, accident commissioner, SWOT-analysis.

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# FORECASTING METHODS FOR RESIDUAL RESOURCE OF HAZARDOUS PRODUCTION FACILITIES

Damages or components violations of hazardous production facilities (HPF) appear in case of long-term exploitation in spite of the fact that equipment may be defectless and all operating rules are kept. The extension of working cycle by means of residual resource considering safety and reliability may increase cost efficiency of HPF. The main forecasting methods and evaluation criteria of HPF residual resource are described in this paper. The data analysis of normative documents on HPE further working life-cycle is reported. The residual resource is determined on the base of operation conditions analysis, results of technical diagnosis and criteria of HPE limit condition. If HPE residual resource is analyzed on the basis of several criteria review, then it is appointed by criterion determining the minimum term of residual resource. Generally estimation of HPE residual resource is carrying out with account of change in construction wall thickness, strength and deformation characteristics of construction metal, cyclic life, criterion of brittle failure - crack resistance, as well as gamma size - percent resource. Periodicity of industrial safety expert review or appointed period of HPE exploitation is regulated from 5 to 10 years, at the same time the carrying out of HPE safety review is the most preferable no less than once every five years.

Keywords: technique, forecasting, equipment, resource.

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