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STRATEGY
OF DEVELOPMENT OF
INFORMATION-COMMUNICATION
TECHNOLOGIES
IN THE REPUBLIC
OF AZERBAIJAN.
THE FORESIHGT-2020

R. Karayev

Annotation

The analysis of National strategy of informatization for the period till 2015 is given. The limited opportunities of rating doctrine of ITU at the decision of a question of the further development of branch connected to the Concept of development of the country up to 2020 are marked. The question of development of the market strategy reflecting mission of ICT at a stage of transition of Republic from resource-export to resource-innovative («not oil») economy is rises.

Key words: ICT, development strategy, «not oil» economy, mission of ICT, Azerbaijan.

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THE ROLE
OF INNOVATION
AND MOBILE TECHNOLOGIES
IN THE DEVELOPMENT
OF SMALL AND MEDIUM
ENTERPRISES
IN EMERGING
MARKETS

V. Taratoukhine, E. Bazhenova

Annotation

The article contains the analysis of the impact of information and communication technologies as well as mobile technologies for the conduction of small and medium business in the emerging countries. Special approach is suggested for the development of the concept of business-processes management on small and medium enterprises.

Key words: information and communication technologies, mobile technologies, business—process, enterprise mana-gement, small business, software-as-a-service, cloud techno-logies.

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FORECASTING
OF ECONOMIC PROCESSES
ON THE DEFINITION
BASIS OF THEIR OPTIMUM
BASE PARAMETERS

Y. Kuznetsov

Annotation

Features of a new method and the algorithms of forecasting based on definition of optimum base parameters of processes and signals are considered, is optimum digitization on level and time in time numbers. It is shown that information systems of forecasting, developed on the basis of this method, allow predicting effectively economic processes.

Key words: Model of the initial data, optimum digitization of the data, optimum data base parameters, predicting operators, forecast.

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R/S ANALYSES
OF STOCK MARKET

A. Zinenko

Annotation

The paper describes a new statistic approach developed by Harold Herst. This temporal series analyses method makes it possible to define the character of temporal series: whether it is persistent (trend), random or anti-persistent. We apply the R/S analyses algorithm to stock indexes and make a conclusion about the character of temporal series.

Key words: Hurst Index, self-similarity, power functions.

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METHOD OF ANNOTATED
SUFFIX TREE FOR SCORING
THE EXTENT OF PRESENCE
OF A STRING IN TEXT

B. Mirkin, E. Chernyak, O. Chugunova

Annotation

A modification of the method of annotated suffix tree (AST) is presented. The modified method does not need pre-specifying the depth of the tree to be built

and involves an intuitive scoring function. The method applies to build a publication-to-keyphrase table, which further on is used to advance in the analysis: (a) interrelation between a text corpus and a pre-specified set of key phrases, (b) relation between a text corpus and a taxonomy of the domain. This is illustrated with real-world examples.

Key words: text analysis, annotated suffix tree, interpretation, conceptual cluster.

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METHODS OF THE CHANGES ANALYSIS OF GLOBAL AND LOCAL PROPERTIES OF TEMPORAL DIGRAPHS

V. A. Kokhov, V.V. Kokhov

Annotation

The new methods for the structural analysis of global and local properties of temporal digraphs are offered. The methods use models of digraphs complexity and to allow analyze the tendencies of change of the global and local properties of temporal digraphs. Comparative analysis method of two approaches to a problem determination fragments significance of temporal digraphs are considered.

Key words: Temporal digraph. Complexity of digraph. Local invariant of digraph. Global invariant of digraph. Trend analysis. The importance of a fragment.

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SOFTWARE APPLICATION FOR INVESTMENT PORTFOLIO STRUCTURE MANAGEMENT

A. Isavnin, D. Galiev

Annotation

The article presents a program product for portfolio selection management. Models and algorithms are described. We also describe the results of experiment with real assets traded at Russian stock exchange market. The strengths and weaknesses of different approaches are reviewed. We describe development potential of the product as well. The application of the software may be associated with exchange trades by interaction with popular trade terminals.

Key words: investment portfolio; modeling; genetic algorithms, neural networks.

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MONITORING AND PLANNING OF DEVELOPMENT OF INFORMATION SUPPORT SYSTEMS FOR CORPORATE GOVERNANCE AND STRATEGIC MANAGEMENT

D. Isaev

Annotation

In the paper the questions of monitoring and planning of Performance Management Information Support Systems (PMISS) development are discussed. The role of the monitoring and planning functions in the general development management system is disclosed, basic requirements to these functions and general principles of their practical implementation are formulated. The main elements of the monitoring and planning system are described, the perspectives of further research are proposed.

Key words: corporate governance; strategic management; performance management system; information support; monitoring; planning.

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THE INNOVATIVE APPROACH TO THE CREATION AND TESTING OF CONTROL AND ACCOUNTING MODULES FOR CORPORATE INFORMATION SYSTEMS

M. Arakelyan, E. Chepin, A. Shabanov

Annotation

In the paper a methodological approach to development of control-accounting modules of corporate information systems is discussed. The approach is based on cyclic recurrence of similar projects performed by a developing company, as well as on innovative technological solutions combined with existing specialized programs. The approach may be applied in the fields of information technology service support systems, as well as inventory and monitoring of hardware and software of corporative computer networks and control of its vehicles.

Key words: corporate information systems, project management, control and accounting systems, systems and technical solutions, software products.