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## THE CONCEPT OF INNOVATIVE DEVELOPMENT OF THE REGIONAL MASS-MEDIA COMPLEX IN THE CONDITIONS OF INFORMATION SOCIETY

*N. Meshkov, A. Matveev*

Annotation

The concept of innovative development of the regional mass-media complex (RMMC) in the conditions of information society is proposed and substantiated. Conditions of formation and development of the regional information-communication mass-media space (ICMMS) are studied. The task of creating of the information-analytical Web-portal of RMMC as a key system-forming element of innovative infrastructure of ICMMS is formulated. The methodological framework of construction of intellectual system of management of innovative development RMMC portal-based RMMC is considered.

**Key words:** innovative development, information society, regional mass-media complex, information-communications mass-media space, information-analytical Web-portal, noosourcing, intellectual systems of management, P.K. Anokhin's functional systems.

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## WEB 3.0 IN E-COMMERCE

*M. Komarov, A. Testova*

Annotation

In this work different definitions of the Web 3.0 concept are presented. The main principles of the Web 3.0 are explained. There is also presented analysis and specific issues of the Web 3.0 and it's implementation for e-commerce. There are proposed some case-studies and short overview of implemented solutions and also future prognoses are proposed at the end of the paper.

**Key words:** Web 3.0, smart commerce, e-commerce.

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## PRINCIPLES OF BUSINESS PROCESS' BEHAVIORAL PERSPECTIVE MODELING

*I. Fiodorov*

Annotation

This paper investigates the formal methods of the business process's behavioral perspective modeling. None of the diagrams used for process modeling, is capable to simultaneously represent: system state, unit of work that changes this state, event that triggers a unit of work and an object which is worked on. The principles proposed in this paper helps to build a full and precise process's model that can be considered to be an algorithm.

**Key words:** state transition diagram, data flow diagram, workflow diagram, Peti net, EPC and BPMN.

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## USING NEURAL NETWORKS FOR SOLVENCY PREDICTION FOR RUSSIAN COMPANIES OF MANUFACTURING INDUSTRIES

*T. Bogdanova, T. Shevgunov, O. Uvarova*

Annotation

The approach to the design of neural network models for the prediction of the solvency is described in this paper. The proposed method was applied to the analysis of Russian companies of some manufacturing industry branches using data extracted from their public financial statement. The explanation for the higher accuracy of neural models in comparison with known models based on logistic regression is also presented in the paper.

**Key words:** neural networks, solvency prediction, bankruptcy predicting models, logistic regression.

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**DETERMINING  
THE CHARACTERISTICS  
OF KOLMOGOROV COMPLEXITY  
OF TIME SERIES:  
AN APPROACH BASED  
ON SYMBOLIC DESCRIPTIONS**

*Y. Smetanin M. Ulyanov*

Annotation

The proposed approach to the analysis of time series is based on determining the Kolmogorov complexity of symbolic lines that are the representations of time series in the space of words over a selected alphabet. Within this approach, methods of symbolic description of levels and trends of time series are proposed. The description is based on a bicriterion method, which was proposed by one of the authors. The characteristics of the complexity for time series are constructed using the estimation of Kolmogorov complexity of lines that are obtained by well known compression algorithms. The characteristics can be applied for clusterization and determination of characteristics of time series.

**Key words:** Time series, symbolic descriptions, Kolmogorov complexity, bicriterion method, histograms, data compression, clusterization

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**COMPREHENSIVE EVALUATION  
OF INDIVIDUAL WORK  
OF SOFTWARE DEVELOPERS**

*V. Marshirov, L. Marshirova*

Annotation

For an comprehensive evaluation of individual work of software developers this paper suggests the method of assigning priorities. It also describes approaches to factors which affect the assessment of work of software developers, ranging of these factors and ranging of software developers by these factors. The suggested methodology can be used for making management accounts regulations in order to perfect the morale and material encouragement of personal subject to strategic and tactical goals of an organization.

**Key words:** programming, management accounting, prioritization method, assessment of software developers' performance, personnel management.

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**METHODS OF ANALYSIS  
AND IMPROVEMENT  
OF THE QUALITY  
OF MASTER'S THESIS  
IN THE AREA OF EDUCATION  
IN «BUSINESS INFORMATICS»**

*R. Vasiliev, G. Levochkina*

Annotation

The article defines the requirements and evaluation criteria for master degree thesis in the area of education in «Business Informatics» and proposes methods of measuring the quality of work. The approach proposed is applied in analysis of quality of master's theses, performed at the Department of strategic management of information systems of National Research University Higher School of Economics. The ways to improve the quality of master's theses are also proposed.

**Key words:** direction of education in «Business Informatics»; master degree thesis, requirements and evaluation criteria, quality of master's theses.

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**COMPUTER-RELATED  
FRAUD  
AS A NEW OFFENSE  
IN THE RUSSIAN LAW**

*V. Elin*

Annotation

The article discloses special features of composition novellas of the Russian legislation Computer-related fraud taking into account the socio-dangerous act, the socio-dangerous result, the specifics of information relations in the sphere of storage, handling or transmission of computer information, of work of information-telecommunication of networks.

In the article are offered recommendations on changing the dispositions of this article in order to improve the fight with cybercrime.

**Key words:** cybercrime, fraud in sphere of computer information, information relations, informational object, information.