

# Аннотации статей на английском языке

## THE RISKS OF THE DIGITAL FUTURE

**Yu. I. Sokolov**, Russian Scientific Society for Risk Analysis, Moscow

**Annotation.** The article examines the possible risks of the oncoming digital revolution.

**Keywords:** digital economy, Internet of things, blocking, large data, robotics, artificial intelligence, quantum computer, 3D printing, biotechnology, telemedicine, control of privacy, social risks, crypto-currency, transhumanism, human risks.

## ECONOMIC RISKS OF DIGITAL ECONOMY

**T. V. Zvereva**, Financial University under the Government of the Russian Federation, Moscow

**Annotation.** In article main types of risks which the Russian economy should face in the conditions of transition to a digital format are considered. In article possible activities the negative consequences of manifestation of risks of digital economy allowing to lower the negative consequences. According to the author the state needs to predict and to react in due time to the formed tendencies of social and ethical character connected with formation of national global digital space.

**Keywords:** digital economy, economic risks, risk of violation of information security, risk of unemployment, risk of aggravation of social and economic inequality, risk management.

## ABOUT THE DIGITAL MANAGEMENT OF THE STATE AND ECONOMICS

**E. D. Solozhentsev**, St. Petersburg State University of Aerospace Instrumentation, Institute of Business Technologies

**Annotation.** The situation of management of the state and economics, the situation and prospects of the digital economics, objects of digital management of the state and economics are considered: ministries, socioeconomic systems; the safe space of mankind. As a management criterion, the safety of the system is chosen, it is determined by the concepts of risk and "acceptable safety".

For the digital management of the state and economics, new types of events-propositions and new types of logic and probabilistic (LP) risk models are introduced, methods for LP-analysis of system risk, LP –management of systems risk, and assessment of LP-quality of management systems are presented.

For digital management of the state and the economy, special software packages, an additional education course for managers, economists and teachers, and the computer network for monitoring and management in almost "real" time are described.

**Keywords:** digital economics, digital management of objects, state, socioeconomic systems, safety of space, logical and probabilistic models, risk, safety, quality, non-validity, computer network, monitoring.

## THE STATE AUDIT AS A METHOD OF THE ANALYSIS OF FINANCIAL RISKS IN THE RUSSIAN FEDERATION

**Y. E. Abuzyarova, N. E. Novikova**, Financial University under the Government of the Russian Federation, Moscow

**Annotation.** The political and economic events occurring in the world at 2014 — beginning of 2015 showed how important the question of ensuring financial safety of the state is. Not only stability of economic development of the country, but also its sovereignty, and also territorial integrity depend on success of implementation of this task. Financial control, now, is one of basic elements of system of ensuring financial safety of the country. To more detailed consideration in this work audit financial control as a factor of ensuring financial safety of the Russian Federation is offered.

**Keywords:** state audit, financial safety, Audit Chamber of the Russian Federation, control.

## ON THE PREDICTION OF THE BEHAVIOR "TAILS" DISTRIBUTIONS AND EVALUATION "EXPECT THE UNEXPECTED" LOSSES IN RISK MANAGEMENT

**A. A. Bykov**, Russian Scientific Society for Risk Analysis

**Annotation.** The paper discusses the main aspects of the asymptotic theory of probabilities of extreme events, allowing for quantitative risk assessments to solve important practical tasks: 1) to reasonably predict the asymptotic behavior of the "tails" of the distributions on the basis of statistical processing of existing data; 2) calculate the expected value of a threshold value of losses (predict the value of "expect the unexpected" losses). In addition, the work demonstrates the effective use of graphic statistical analysis technology based on the use of intervals of equal probability instead of classic intervals of equal length during the statistical testing of hypotheses and selection of the distribution laws.

**Keywords:** risk management, risk assessment, forecasting unforeseen losses, asymptotic theory of probabilities of extreme events, statistics of extreme values, graphical statistical technologies.

## MODELS OF THE SYSTEMS CONTROLLING THE RISKS OF ENTERPRISES

**Y.D. Zubenko**, National Technical University of Donetsk (DonNTU), town Krasnoarmeisk (Pokrovsk), Province of Donetsk, Ukraine

**Annotation.** Examining the conception and technologies of models of the systems elaborated by author and demonstrating their applications at examples of enterprises, at their system of production and system of control and also the risks of these systems and possibility of theirs controls. Expounded conception and technologies have vast correlation with the system's themes at the modern literature and are able utilized at investigations, projections, and administrations and at universities.

**Keywords:** systems, modeling, technologies, control, enterprise, risks.

## ABOUT THE DOMESTIC NORMATIVE-METHODICAL BASE OF PHYSICAL SECURITY

**D. L. Filippov**, Bauman State Technical University, Moscow

**Annotation.** This article discusses the status of normative-methodical base of physical security. It is noted that the methods of categorization, analysis of threats and vulnerabilities differ in the vagueness of the terminology and there is no single terminological approach. Stated that the threat analysis is often not considered is the relationship of vulnerabilities and model intruder. It is still not compiled the databank of security threats and actual vulnerabilities.

**Keywords:** the normative base, the categorization, analysis of threats, intruder's model, vulnerability

## SAFETY OF TECHNOLOGICAL PURIFICATION PROCESSES OF WATERS FROM RADIOACTIVE CONTAMINATION AREA

**A. V. Konovalov**, Rostov State University of Railway Transport, Rostov-on-Don

**A. V. Nikhaeva**, Don State Technical University, Rostov-on-Don

**M. A. Konovalov**, North-Caucasian-Suburban-Company, Rostov-on-Don

**Annotation.** For effectively addressing the urgent problem of purifying water from radionuclides, suggested the use of compact, mobile, quick pressure vertical filter, which provides two-tier cleaning contaminated water through porous cylindrical filtering elements and load bulk sorbent-graphene oxide flakes.

**Keywords:** safety of technological processes, two-step purification of water, radionuclides, quick pressure vertical filter, porous cylindrical filter elements, flakes of graphene oxide.