

ABSTRACTS

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**SITUATIONAL MANAGEMENT
FROM THE POSITION OF POSTNEOCLASSIC SCIENCE**

Situational management is examined from the position of postneoclassic scientific rationality which acts on the premise that knowledge about the object is correlated not only with the speciality of object interaction with watch facilities, but also with the value-goal structures of the subject activities. The main phases of the decision-making process of problem situation regulation are described. It is emphasized that the situational management should be the dominant paradigm in organization of control processes in XXI century.

Keywords: *situational management, decision-making process, postneoclassic science, problem situation, actor, holon, ontology, intersubjective theory, ontological situation model.*

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ONTOLOGICAL MODELING IN SITUATIONAL MANAGEMENT

The paper compares the situational management diagram and the general scheme of ontological modeling. Between the elements of these schemes is set correspondence to justify an ontological approach to the implementation of situational management. A comparison of elements can explain the mechanisms of situational management. Construction of information models of reality in the situational management are invited to consider construction of ontology and ontological models of situations.

Keywords: *ontology, object model, ontological model of the situation, situational management, transformation model.*

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**TENDENCIES AND CONDITION IN THE FIELD OF REFERENCE DATA
MANAGEMENT IN THE ENGINEERING INDUSTRY**

The article examines the principles of centralized management of corporate background information in the engineering industry. The use of semantic data models in these systems - Master Data Management (MDM) will make them effective in working with engineering data and semantic integration of MDM and CAD will create a new class of competitive intelligence software systems. As an example of new trends is provides a brief description of the functionality of the control system reference data "Semantic", adapted to the conditions of domestic engineering and integrated with the products of Autodesk, a world leader in CAD.

Keywords: *reference data management, semantic search, ontology, engineering, CAD, Master Data Management, ISO 15926.*

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MODEL “STAGE” FOR THE DEVELOPMENT OF IMAGE-BOARD INTELLIGENT SYSTEMS OF ANTHROPOCENTRIC OBJECTS

We consider the system-board intelligent system kernel anthropocentric object (illustrated by the example of the aircraft), supporting the process of solving the operator (the crew) tasks of the first and second levels of global governance: a class of intelligent information systems (for solving operator situational awareness) and the board promptly advising expert system model session management function (for solving problems quickly determine how to achieve this goal).

Keywords: *Global levels of control, classification of on-board intelligent systems, situational awareness, inference in knowledge bases.*

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ONTOLOGY OF EDUCATIONAL PROCESS IN THE DIRECTION «INFORMATION SYSTEMS AND TECHNOLOGIES»

This paper discusses the common problems of higher education, caused by the transition to a competence paradigm of learning as well as a necessity to take into account the needs of the labour market in specialists education process. Paper's authors had explored the use of ontological approach for solving higher school's tasks. The paper describes the applied ontology of academic process in the field of information systems and technologies and the labour market in this particular field. Furthermore, it presents the ontologies editor, developed by authors, which is part of the complex information technology. The concept of using the ontological approach to build mathematical models for optimization of educational process is being suggested.

Keywords: *the higher school, educational process, labor market, applied ontology, interpretation of knowledge, ontology editor.*