Usage of Expert Evaluation Methods for Collection of Data about Social Systems

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Contemporary level development of human kind and data analysis techniques reveals the new possibilities for studies of social systems and processes. That leads to mathematization of appropriate scientific fields and demands the adaptation of existing tools for acquisition of information about object under study and sometimes - creation of new ones.
Different nature of the objects under study that is characterized by the prevalence of the fuzzy characteristics and their overwhelming majority over deterministic ones results in high demand for use of expert evaluation methods in the analysis of social systems of different scale. Their main advantage is wide area of applicability that cannot be provided by mathematical methods, the results of these methods application can be both qualitative and quantitative. But one should also keep in mind that the possibilities of expert evaluations are limited to subjective possibilities of individual judgments and following vulnerabilities to data adequacy.
In current report author presents the practice of expert evaluations applied to the problem of acquisition of quantitative and qualitative information about contemporary geopolitical processes. That involved the development of appropriate mathematical models, application of well known Delphi and AHP methods and modification of common pairwise comparison to the needs of the research. The described research also results in development of special information system for the initial data acquisition from the experts, its further processing and analysis.
The obtained data (both initial and derived) can be used for better understanding and description of the structure and properties for examined objects and processes. It can be also a basis for building more precise mathematical models and can be used in decision-making processes.