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**MATHEMATICAL MODEL DESIGN OF CRITERIA HIERARCHY  
OF QUALITY IMPACT OF MULTIMEDIA WITH VIDEOCONTENT**

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***Research methodology.*** *The methodological basis of the research is made by systematic analysis of the current technological process of information perception in media publications; mechanism of semantic networks to reproduce the links between impact criteria on perception quality of the technological procedures; hierarchy analysis method for ranking criteria; the methods of research of processes and multi-criteria optimization.*

***Results.*** *Based on the research of the process of multimedia publications containing video content, we have developed an optimized model that shows the effect of criteria on quality of the design of the latter. This model makes it easy to prioritize the criteria when designing the publication. The research shows that the developers pay little attention on video processing for multimedia publications.*

***Novelty.*** *The study is a new and very important direction today. With this modeling it is easier for a designer to prioritize impact criteria in the development of multimedia publications.*

***The practical significance.*** *You can design relevant programs based on the models, which can automatically perform designing of a multimedia publication. Therefore, the results of optimization will be used to further research in the field of designing of multimedia publications with different content.*