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**MATHEMATICAL MODEL OPTIMIZATION 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.*

***Results.*** *The study has singled out the set of impact criteria on the quality of information perception in the design and use of multimedia publications; the essence of criteria impact and their relationship has been shown; the graph of relationships between these criteria, which are hierarchically ordered by priority of impact on the process of information perception in media publications has been developed.*

***Novelty.*** *The article reveals the general nature of the analytical software in the formation of components of information technology of prognostic evaluation and quality assurance of electronic media publications. The conditions for the synthesis of multilevel models of priority of criteria action, forecasting and quality assurance by means of fuzzy logic have been formed. For the first time the graph of relationships between these criteria, which are hierarchically ordered by priority of impact on the process of information perception in media publications has been developed.*

***The practical significance.*** *These results have concluded on the significance of the publication navigation in the design of multimedia resources. The results of the study have confirmed that this criterion affects all others, which are considered by the authors, at the lowest level of the criteria. The results can be valuable for future researchers who will design similar software resources, namely multimedia publications.*