

**Название публикации:**

Evaluation of innovative development of Russian regions on the basis of neural network simulation

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**Аннотация:**

Clustering of regions of the country is carried out (by the method of Kohonen Self-Organizing Maps) on the basis of neuromodeling and forecasting their innovative development in the medium term by forming an adequate Bayesian ensemble of dynamic neural networks. Application of this method allows estimating the degree of differentiation of the Russian Federation entities depending on the level of innovative development. In consequence of the conducted empirical research, it was revealed that current situation was characterized by polarization of Russian regions in terms of innovative development. At that, there were some positive changes in the cluster structure of the country's regions in 2014-2015. In particular, the number of outsider regions in terms of their innovative development has decreased. At the same time, the forecasting results in the medium term show a slight slowdown in the innovative development of leading regions such as Moscow and St. Petersburg. © 2018 Academic Press. All rights reserved.

**Ключевые слова:**

Bayesian ensemble of neural networks, clustering of regions, Forecasting of innovative development, Innovative development, Innovative development factors, Innovative system, Kohonen Self-Organizing Maps, Regions of Russia