

Systemic-Structural Classification of Technical and Economic Efficiency Indicators

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Citation: Karzaeva N.N., Samoshkin M.M. Systemic-Structural Classification of Technical and Economic Efficiency Indicators, *Kompetentnost' / Competency (Russia)*, 2026, no. 3, pp. 26–32. DOI: 10.24412/1993-8780-2026-3-26-32

key words

thermal power plants, technical and economic efficiency, system of indicators, management levels, types of efficiency

The indicators of technical and economic efficiency are the most important indicators of the current state of the organization's functioning. They are most significant in assessing the energy and resource efficiency of the company, and they also play a key role in the formation and further implementation of the enterprise management model. The article formulates the definition of technical and economic efficiency, substantiates the integrative-hierarchical systematization of indicators characterizing its level. The essence of this systematization is to separate all indicators by levels of managerial decision-making (hierarchy), and within the level by types of effectiveness (integration of disparate aspects of effectiveness).

References

1. Meshalkin V.P. Resource-energy efficient methods of energy supply and waste minimization of oil refining industries. Fundamentals of theory and best practical results, Moscow, Genoa, *Khimiya*, 2010, 393 P.
2. Kravchenko K.A., Meshalkin V.P. Management of a large company, Moscow, *Akademicheskii proekt*, 2010, 351 P.
3. Bychko V. Everything a project manager needs to know about Lean (Lean production); <https://bychko.ru/lean/> (acc.: 19.10.2025).
4. Naryadkina N.A., *Problemy sovremennoy nauki i obrazovaniya*, 2017; <https://docs.yandex.ru/docs/view?tm=1762973999&tld=ru&lang=ru&name=podkhod-k-raschetu.pdf&text> (acc.: 10.11.2025).
5. Karpachev I.A., Morozov V.V., Bokov S.I., *Izvestiya Rossiyskoy akademii raketnykh i artilleriyskikh nauk*, 2021, no. 4(119), pp. 49–57. DOI: 10.53816/20753608_2021_4_49.
6. Koshkarov V.A., *Vestnik Permskogo universiteta. Seriya: Ekonomika*, 2016, no. 1(28), pp. 147–156.
7. Tkachuk N.V., *Auditorskie vedomosti*, 2020, no. 1, pp. 35–40.
8. Boldyreva V.S., etc. *Teoreticheskie osnovy khimicheskoy tekhnologii*, 2020, vol. 54, no. 3, pp. 299–303.
9. Shcherbakova N.S., *Voprosy ekonomiki i upravleniya*, 2016, no. 5(7), pp. 119–128.
10. Sarchin R.R., Medvedeva G.A., *Nauchnyy lider*, 2023, no. 36(134); <https://scilead.ru/article/4988-raschyot-tekhniko-ekonomicheskikh-pokazatelej> (acc.: 10.11.2025).
11. Abaeva E.A., Averina Yu.M., Subcheva E.N., Shumova V.S., *Uspekhi v khimii i khimicheskoy tekhnologii*, 2021, vol. XXXV, no. 1, pp. 13–15.
12. Meshalkin V.P. Fundamentals of intensification and resource-energy efficiency of chemical and technological systems, Smolensk, *Print-ekspres*, 2021, 442 P.
13. Savinkov S.V., Averina Yu.M., Zvereva O.V., Rubleva S.A., *Uspekhi v khimii i khimicheskoy tekhnologii*, 2022, vol. XXXVI, no. 13, pp. 123–125.
14. Karzaeva N.N., Zhuravleva O.S., *Ekonomika i upravlenie: problemy, resheniya*, 2014, no. 8, pp. 160–165.
15. Karzaeva N.N., Karzaeva E.A. A model for assessing the solvency of an economic entity, Int. ec. symposium–2020, Int. sc. conf.: Sustainable development: society and economics, Sokolov readings. Accounting: a look from the past to the future, St. Petersburg, *SPbGU*, 2020, pp. 336–340.

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