FEATURES OF THE DEVELOPMENT OF OPTIONAL TECHNOLOGIES IN THE DIGITAL ECONOMY

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The article is devoted to the study of the peculiarities of the digital economy in the system of new development of real options. It is shown that strengthening the role of the digital economy in modern conditions opens up a huge range of opportunities for different enterprises. It was noted that its strengths – lower costs, increased security and transparency of transactions, attracted the attention of various sectors of the economy.

The approach proposed by the authors allowed us to conclude that today the digital economy has a number of subtleties associated with its lack of study and understanding of technical implementation. flexibility. However, it is shown that it is indisputable that the digital approach is able to transform the internal structure of the enterprise.

The main features of the development of optional technologies as one of the most important components of the digital economy are substantiated in the work. Thus, the analysis of options as the most flexible and practical financial instrument of the digital economy was conducted. The research reveals the essence of the main provisions of tactics and strategy in solving the problem of determining the price of options. At the same time, a new, author's classification of option contracts is given, which allowed to determine the ways of their application, use and development. At the same time, the analysis of the problem of estimating the price of option contracts showed the relevance of developing new mathematical methods for their reliable and accurate evaluation.

The paper shows that in modern conditions of digital economy development the interest in the concept and technique of real options is growing significantly, they began to pay attention as a potentially important tool for assessing and developing enterprise development strategy. It is proved that the development of modern data processing models, including Big data, suggests that there are new opportunities to apply the method of real options for the digital component of corporate governance through a number of properties of both options and value-oriented approach to corporate governance in general.

In order to reflect the processes of income in the digital sphere based on the application of the method of real options, the main aspects of the formation of sound value decisions in enterprise management. Based on the proposed approach, the possibilities of using real options for the economy, which operates in the context of digitalization and implementation of business processes based on digital platforms.

References

1. Hengels, A. (2005, September). Creating a Practical Model Using Real Options to Evaluate Large-Scale Real Estate Development Projects. *Massachusetts Institute of Technology, Cambridge*. Published. Available at: https://core.ac.uk/download/pdf/4398593.pdf

2. Mun, J. (2002). Real Options Analysis: Tools and Techniques for Valuing Strategic Investments and Decisions (Book and CD ROM) (1st ed.). Wiley.

3. Neufville, R. (2003). Real Options: Dealing With Uncertainty in Systems Planning and Design. *Integrated Assessment*, 4(1), 26-34. Available at: https://doi.org/10.1076/iaij.4.1.26.16461

4. Samis, M. R., Laughton, D., & Poulin, R. (2003). Risk Discounting: The Fundamental Difference between the Real Option and Discounted Cash Flow Project Valuation Methods. *SSRN Electronic Journal*. Published. Available at: https://doi.org/10.2139/ssrn.413940

5. Black, F., & Scholes, M. (1973). *The pricing of options and corporate liabilities*. Journal of Political Economy.

6. Merton, R. C. (1973). Theory of Rational Option Pricing. *The Bell Journal of Economics and Management Science*, 4(1), 141. https://doi.org/10.2307/3003143

7. Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147–175. https://doi.org/10.1016/0304-405x(77)90015-0

8. Annual International Real Options Conference. (n.d.). Realoptions.Org. Retrieved August 18, 2021, from http://www.realoptions.org

9. Hutchison, N., & Schulz, R. (2007). A real options approach to development land valuation. *University of Aberdeen, RICS Research*. Published. https://ru.scribd.com/ document/240502491/A-Real-Options-Aproach-to-Dev-Land-Val

10. Konoshenko, M. (2007). *Metodicheskie osnovy analiza ekonomicheskoy effektivnosti investitsionno-stroitelnykh proektov s uchetom ikh optsionnykh kharakteristik*. Dis. kand. ekon. nauk. Moscow. Available at: https://www.dissercat.com/content/metodicheskieosnovy-analiza-ekonomicheskoi-effektivnosti-investitsionno-stroitelnykh-proekt.

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