

Digital Transformation of the Global Economy: Analysis of the Prospects for Developing and Using Blockchain Technology*

Alexey V. Bataev

Associate professor of Peter the Great St. Petersburg Polytechnic University, St. Petersburg,
Russian Federation, bat_a68@mail.ru

Correspondence should be addressed to: Alexey V. Bataev; bat_a68@mail.ru

* Presented at the 37th IBIMA International Conference, 30-31 May 2021, Cordoba, Spain

Copyright © 2021. Alexey V. Bataev

Abstract

Today, global development cannot be imagined without the widespread introduction of innovative digital technologies. The implementation of information and communication technologies in all economic sectors has led to the formation of a new economic direction based on the massive introduction of digital technologies - the digital economy. Today, artificial intelligence technologies, big data, cloud computing are one of the main drivers of the digital economy, which have received a wide practical application. Along with the above technologies, one of the promising areas of the digital economy is blockchain technology, which is initially used in the financial sector on the cryptocurrency market. In the modern development of blockchain technology, they have gone beyond the financial sphere of application and are trying to win new niches in other economic areas. In this regard, this study involves the concept of blockchain technology as a distributed registry in the information, functional space of a computer network is considered, the features of the functioning of the blockchain technology, and the existing problems of its formation as a new paradigm of information technology are noted. The global blockchain technology market is investigated, the main financial and quantitative indicators are analyzed: market volumes, growth rates, the main players are identified. This study involved assessing the development and using blockchain technology in other economic areas, except the financial one. Based on the analysis, further development prospects and areas of using blockchain technology are considered, both in the near and long term.

Keywords: Information Technology Management, Digital Economy, Innovation, Distributed Database, Global Market, Financial Indicators, Growth Rates