

BLOCKCHAIN TECHNOLOGY AND SUSTAINABLE PERFORMANCE

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In a highly competitive environment, businesses continue to improve their operational procedures and practices, trying to achieve excellent indicators of corporate sustainability, which is recognized by scientists and managers as one of the effective methods of strengthening corporate reputation and operational efficiency. Companies are increasingly focusing on managing risks associated with sustainable development to gain competitive advantages. Typically, they set Key performance indicators (KPIs) for planning and evaluating sustainable development and corporate social responsibility. This contributes to the achievement of numerous competitive advantages:

- building brand loyalty;
- attracting more responsible investors;
- reducing costs;
- improving the efficiency of innovation activities, etc.

As a result, all other KPIs of the enterprise improve, especially in the long term. The use of digital analytics allows companies to maximize the efficiency of these processes.

For many enterprises, blockchain technology can play a decisive role in achieving the desired sustainable development KPIs. It is characterized by transparency, reliability of information and speed of its circulation in complex networks, such as typical industrial supply chains. Blockchain technology is able to optimize and improve the disclosure of social and environmental information through automated solutions. Blockchain can also transform business operations by optimizing resource management by reducing waste and costs. Accurate identification and tracking of materials and components throughout the supply chain makes their reuse much more manageable, and also introduces complex recovery procedures. The implementation of blockchain technology in enterprises helps prevent fraud and strengthen trust between stakeholders.

Blockchain technology streamlines the tracking and classification of material and information flows, enhancing the efficiency of collection, recycling, and disposal systems while simultaneously reducing costs and minimizing environmental impact.

The use of blockchain by enterprises contributes to the establishment of a higher level of security. In particular, the level of prevention of counterfeiting is increasing, which is facilitated by the technology's ability to support the creation of extremely secure and reliable digital identification systems.

Therefore, in parallel with the growing awareness of sustainability, the implementation of blockchain technology is becoming a transformative business strategy to improve key sustainability indicators of enterprises.