

DIGITAL TRANSFORMATION

The Company's goal in digital transformation is to overcome technological challenges and create competitive advantages in Russia and abroad through the large-scale use of digital technologies.

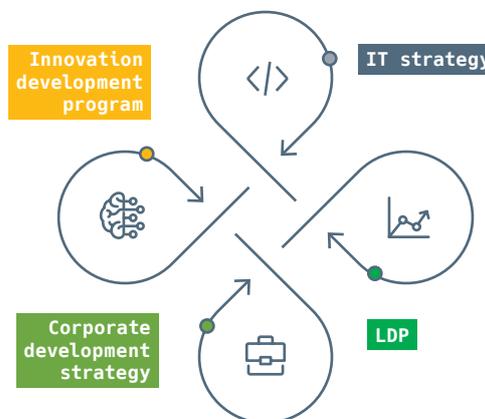
Today, digital transformation of business is one of the leading global trends. Companies are using digital technologies and IT developments in all areas, from increasing business efficiency to employee training.



The Russian oil and gas industry has actively joined this process and ZARUBEZHNEFT GROUP is no exception. Today, the Company is actively building up potential for the use of digital technologies, which will provide an opportunity to strengthen its position as a high-tech player on the hydrocarbons production market both in Russia and abroad for at least the next 10–20 years.

The Company has developed and approved a Digital Transformation Strategy. The Strategy takes into account and comprehensively complements the goals and objectives of the strategic planning documents adopted by Zarubezhneft, including the Corporate Development Strategy and the LDP, and is closely linked with the Company's Innovative Development Program and IT Strategy:

Digital Transformation Strategy



>30 new digital projects
launched in 2020

Starting in 2020, the Company launched Digital Harmony, the second phase of its Digital Transformation Strategy.

ZARUBEZHNEFT HAS IDENTIFIED THREE MAIN STAGES OF DIGITAL DEVELOPMENT:

2013–2019

Stage I

Collecting key production information

2020–2022

Stage II

Digital harmony (Pilot projects)

2023–2030

Stage III

Digital superiority

Key objectives of the Digital Harmony stage

- ▶ Development of the concept of corporate data management
- ▶ Ensuring the quality of data and its compliance with corporate requirements
- ▶ Automated formation of corporate reports based on primary data
- ▶ Implementation of complex digital projects and the pilot testing of digital technologies and solutions available on the market
- ▶ Establishment of a training system for the Group's employees and involving them in the implementation of the Digital Transformation Strategy
- ▶ Targeted search for and use of digital technologies to quickly find, diagnose, and evaluate new assets
- ▶ Digital transformation of production facilities as part of the Digital Field program.

The priority focuses of Zarubezhneft's strategic development shape the scope of the digital projects portfolio included in the Digital Transformation Program. These are primarily the key projects that have the greatest impact on the Company's business through the introduction of digital solutions in addition to projects in priority areas of the Company's technological and innovative development.

Zarubezhneft launched more than 30 new digital projects in 2020 as part of its four comprehensive digital transformation programs. The key project was a project to create a corporate digital platform called Nestro Data. In early 2020, a project concept was developed that specified the general principles and approaches to data management organization at the Zarubezhneft Group based on best international and Russian data management practices, the DAMA-DMBOK data management manual, as well as the practical experience of Company employees.

Zarubezhneft plans to shift the emphasis to work with data and transition from local problem solving to systematic and long-term work based on data at the corporate level.

One of the first completed projects was the creation of a digital duplicate of the Kharyaga field Central Production

Facility (CPF). An electronic technical digital passport provides prompt access to the detailed engineering and technical information of the CPF. To create it, the employees of ZARUBEZHNEFT-Dobycha Kharyaga uploaded

More than
23,000 objects
7,000 documents
180,000 passport ratings
after systematizing heterogeneous paper data of design, working, engineering, as-built, and operational documentation

In addition to the passport, a highly detailed 3D model of the Kharyaga field CPF containing over 1 million details was created. The 3D model became the basis of virtual simulators for the training and certification of employees. The simulator algorithms are created in accordance with the plant's process regulations and allow practicing both standard operations, such as starting up the inlet separator or external pumping, and emergency situations in accordance with the emergency response plan in virtual reality, without creating real risks in production.

In 2020, the Company put into commercial operation the Operational Monitoring Center of Zarubezhneft — a tool to coordinate the production activities of Upstream unit enterprises. The Center's job is to make swift decisions on the Company's strategic tasks. The computer system not only consolidates data from all facilities but also builds connections and links between them. As a result, any employee who has the appropriate access to the system can see all the information on a certain facility — from archived indicators to current day data with an increment of 2 hours.

Development opportunities

The Company considers artificial intelligence technologies, including machine learning, big data processing technologies, and digital twins, to be the highest priority for the development and introduction of end-to-end digital technologies now and in the near future.

In 2021, the Group plans to continue searching for, studying, and initiating projects of different scales, from the introduction of existing digital solutions on the market to projects involving the creation of in-house developments that are consistent with the Company's key focuses.