

DIGITAL TRANSFORMATION

Currently, the oil and gas industry follows other capital intensive sectors to implement new opportunities of complex use of digital technologies. Digital transformation results in substantial achievements for both the industry and the society in general. Zarubezhneft JSC realizes the competition challenges on the domestic and global markers in a long-term perspective (for decades ahead), and demonstrates its readiness to all necessary transformations. For a number of priority processes having the highest effect on Zarubezhneft JSC business, such as reserves management, field development, oil and gas production, search and evaluation of new projects, the Company excels competitors and is at the same level with the industry leaders. The total level of maturity of key processes in Zarubezhneft JSC is sufficient for modifying business processes using digital technologies.

The Company elaborated and approved the Digital Transformation Strategy.

The Digital Transformation Strategy takes into account and comprehensively supplements the goals and objectives



of the adopted strategic planning documents of Zarubezhneft JSC, including the corporate development strategy, Long-Term Development Program, and is closely linked

to the innovative development program and the IT strategy of the Company.

Zarubezhneft JSC has defined 3 key stages of digital strategic development:

STAGE I	STAGE II	STAGE III
2013—2019	2020—2022	2023—2030
Acquisition of key production information	Digital harmony Pilot projects	Digital supremacy



In 2019, the Company successfully completed Stage 1 of the Digital Transformation Strategy.

During the implementation of Stage 1, the Company overcame fragmentation of source information flows in all segments, which increased convenience and ease of the data usage, ensured the fastest possible reception, processing and analysis of the data, and outlined efficient management mechanisms data. Key outcomes of Stage 1 of the Digital Transformation Strategy are as follows:

- 93% of wells of Company assets in Russia have been equipped with the telemetry, ensuring real-time data transmission;

- 5 own software systems have been developed in the area of the Company's technological focus;
- data exchange has been introduced — 35 information systems of the Company are integrated with each other.

Starting from 2020, Zarubezhneft JSC begins the implementation of Stage 2 of the Digital Transformation Strategy (Digital Harmony). Its key objectives will be:

- development of a data management automation concept;
- ensuring data quality and its compliance with the corporate requirements;
- automated formation of corporate reporting based on source data;
- implementation of complex digital projects, pilot testing of digital technologies and solutions available on the market;
- building of a training system for Group employees, their involvement in the Digital Transformation Strategy delivery;
- targeted search and use of digital technologies for quick search, diagnosis and evaluation of new assets;
- transition from predictive to prescriptive analytics.

The priority focuses of Zarubezhneft JSC strategic development determined the contents of the digital project portfolio included in the Digital Transformation Program; mainly these are the key projects that have the greatest impact on the business of Zarubezhneft JSC due to introduction of digital

solutions as well as projects in priority areas of technological and innovative development of the Company.

The Digital Transformation Program includes four comprehensive projects:

- digital field (improvement of production performance);
- digital evaluation of new projects (accelerated and improved performance when entering new assets);
- digital office (performance improvement of organization management business processes);
- digital expertise of personnel (working with talents and use of advanced technologies to develop employees).

The highest priority areas for the development and introduction of end-to-end digital technologies Stage 2 of the Strategy are machine learning technologies, big data processing, digital twins and artificial intelligence. In 2019, over 10 projects were implemented, with at least 25 more projects of various scale scheduled for 2020 — from implementation of digital solutions available on the market to creation of in-house developments, meeting the key trends of the Company's growth.

Implementation of the Digital Transformation Strategy will strengthen Zarubezhneft's JSC position as a digital hi-tech participant of the hydrocarbons production market in Russia and abroad for at least 10–20 years.