

DIGITAL TRANSFORMATION

Leveraging digital tools to unlock efficiency and safety improvement potential

Digital transformation requires a data-driven culture of business management. Across all segments of our operations, we are building next-generation systems of process management based on digital field and asset models and cognitive systems for efficient decision making.

500+

digital initiatives and projects in the Company's portfolio

60+

R&D projects implemented in 2018

“Digital transformation brings additional competitive advantages and strengthens our technological leadership in the industry as we shift towards managing all our business processes using digital models and data-driven insights.”

Alexander Dyukov
Chairman of the Management Board
and CEO Gazprom Neft

DIGITAL TRANSFORMATION IN QUESTIONS AND ANSWERS

Head of the Digital Transformation Directorate at Gazprom Neft, answers questions about digital transformation

Andrey Belevtsev

WHAT MAKES THE DIGITAL TRANSFORMATION NECESSARY?

Gazprom Neft has reached a robust level of digital maturity. Its business units pursue a variety of digital initiatives that need to be synchronised to capture the value of synergies. It is our common understanding within the Company that a well-thought and systemic approach to leveraging digital technology will help unlock the Company's long-term strategic benefits.

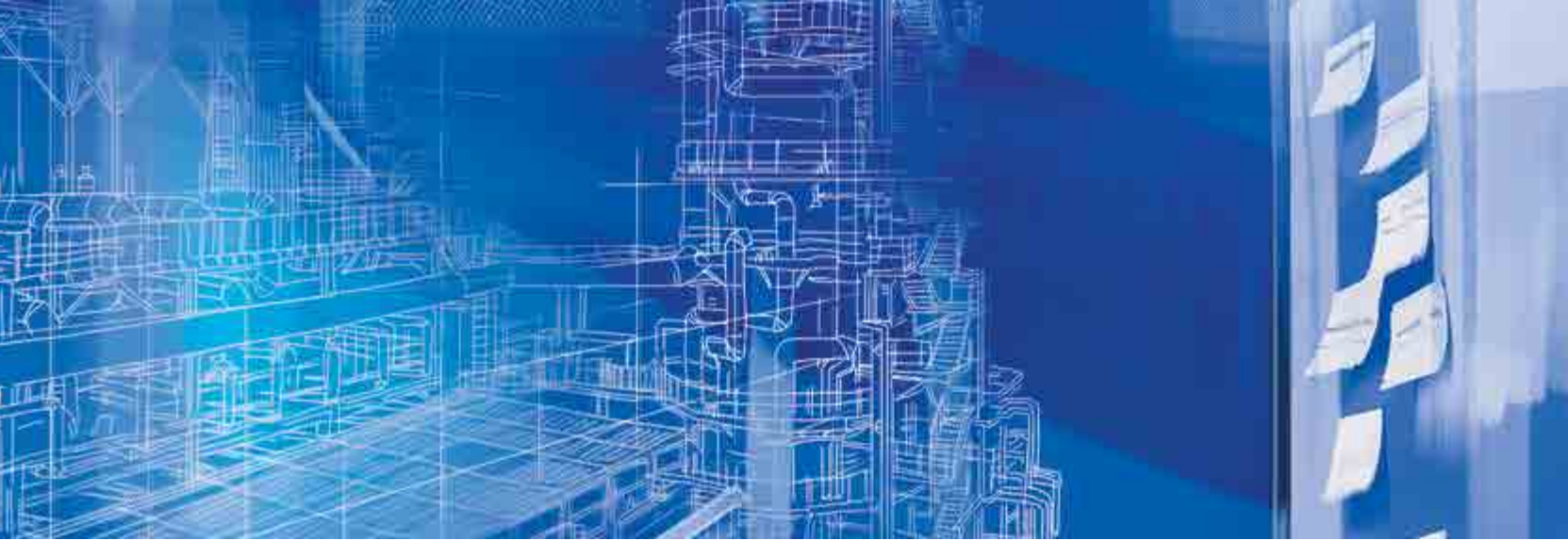
WHO IS IN CHARGE OF MANAGING THE TRANSFORMATION?

It is a Company-wide process that involves all operating and functional units. The Digital Transformation Directorate manages the Digital Transformation Programme and acts as a strategic partner for all business units in the implementation process. We have been making consistent progress in implementing the digital strategy in 2018, with the number of digital project growing ten-fold, from 50 to 500.

WHAT ARE THE GOALS OF DIGITAL TRANSFORMATION?

To further improve the efficiency and safety of our operations, we have identified the following deliverables to be achieved by 2030:

- > data-driven decision making in place for all key decisions;



- > digital models of all physical devices and processes in place;
- > quick adjustments and end-to-end optimisation along the production chain;
- > full asset potential unfolded;
- > unmanned autonomous assets added to the portfolio;
- > zero safety violations or accidents;
- > focus on a partnership ecosystem and B2B and B2C platforms development.

WHAT IS THE VALUE OF DIGITAL TRANSFORMATION IN TERMS OF SAFETY?

It helps enhance safety in many ways, such as developing digital models for our fields and facilities. Too often we cannot afford experimenting with real objects due to multiple difficulties and high costs. Digital models enable virtual experiments, with only proven results introduced into real production processes. This gives us a whole new level of both efficiency and safety for people and the environment.

WHAT ARE THE KEY RESULTS ACHIEVED IN 2018?

We established the Digital Transformation Directorate and digital transformation centres in all our production divisions. We also launched a project to develop Gazprom Neft's Digital Transformation Strategy and approved the Vision of a Digital Oil Company. The Digital Vision Strategy and digital roadmaps were also developed. Digital competence centres were set up, including those with a focus on big data and cognitive technologies. New product and service development was enhanced.

As part of the digital agenda, we implemented over 60 promising R&D projects in machine learning and artificial intelligence, industrial Internet of things, virtual and augmented reality, wearable devices, robotics and more. We commenced the development of the Company's single digital platform and a corporate platform for analytics and data management. A big data and artificial intelligence competence centre was launched. Over ten display stands were installed in Gazprom Neft's House of Innovations that showcase the practical use of digital technologies to address the Company's real challenges.

Gazprom Neft was the first-ever Russian company included in The 2019 CIO Agenda: Securing a New Foundation for a Digital Business published by Gartner (case study "Gazprom Neft Adopts Digital Business Strategies to Drive New Efficiencies").

WHAT ARE YOUR TARGETS FOR 2019 AND 2020?

First of all, we are going to launch the entire digital transformation process using a single management model and also kick off the first wave of digital transformation programmes in our production divisions and the Corporate Centre. Secondly, we will focus on implementing priority digital projects that have already proved to have a clear business value. They will be used to improve digital transformation management. We will also launch a digital platform followed by expansion of the digital transformation model to cover all of the Company's digital initiatives.

Another priority is switching from purchasing ready-made third-party products to developing in-house solutions by the Company individually or in cooperation with tech and industry partners. Our successful track record shows that hi-tech industrial companies like Gazprom Neft have now evolved from technology consumers into technology developers.

WHAT ARE THE KEY DRIVERS OF FULLY-FLEDGED DIGITAL TRANSFORMATION?

The key drivers are a new corporate culture, flexibility and cross-functional collaboration. Having a strong developer and a great geologist is no longer enough in today's day and age, as we need to bring these two experts together by creating the best possible setting for their joint work and ambitious forays into important topics.

For more details, see the Digital Project subsection on p. 121

Gazprom Neft's digital strategy

SINGLE DIGITAL MANAGEMENT SYSTEM

A single framework embracing all systems and processes will help roll out the best solutions across the Company as well as seamlessly integrate new systems. It will also enable end-to-end optimisation across the entire value chain.

DATA-DRIVEN DECISION MAKING

Building a single data management system to enable prompt access to all data and ensure higher speed and quality of decision making.

PRODUCT-CENTRED APPROACH

The Company's key goal is to create value for the client. To achieve this and to maximise efficiency, we rely on the IT industry's working formats such as cross-functionality and multidisciplinary teams. Team work will drive the development of new products both for internal and external customers.

DIGITAL TRANSFORMATION IMPACT

-40%

faster delivery of large-scale projects

-20%

lower production and logistics losses

-50%

shorter time to start oil production

+30%

higher exploration efficiency

"Digital transformation is our response to business challenges; it requires that we overhaul our entire corporate culture and decision making approaches. At Gazprom Neft, we rely on data to make more efficient and effective decisions, leveraging basic principles of psychology along with the most advanced technologies."

Andrey Belevtsev
Head of the Digital Transformation Directorate at Gazprom Neft



Gazprom Neft builds new business models based on digital solutions



What will be an oil company of tomorrow?



Digital transformation in the oil industry
(a story by the Russia 24 TV channel)



Building the world's first digital platform to manage an oil company