



TRANSFORMATION AND DIGITALISATION

In 2019, taking into account the growing role of digital technologies in the modern world, Samruk-Kazyna JSC announced the transition to digital transformation for all portfolio companies. The new approach to the implementation of the Digital Transformation Programme is based on principles, including simplicity, clarity, and the presence of real benefits.

Given the new vision of the Fund, KMG implemented measures to update the portfolio of the Digital Transformation Programme (hereinafter - DTP). The following key criteria are used to select the projects:

- Comprehensive change of people, business processes and technologies;
- The scale of change;
- Real economic effect/support strategic KPI.

On 4 September 2019, KMG’s Board of Directors approved the Roadmap of the Digital Transformation Programme for 2019-2024. At year-end 2019, the KMG DTP portfolio included 14 projects and 14 measures within 8 initiatives:

1. Ensuring industrial safety;
2. High-performance culture;
3. Reengineering of production and corporate business processes;
4. The new Procurement model in the Fund’s Group;
5. Increased operational efficiency through data analysis;
6. Implementation of Cybershield project in the Fund’s Group;
7. Digital Business Solutions;
8. Improving the efficiency of IT.

In 2019, 3 projects and 2 measures under the Digital Transformation Programme were implemented. This includes the “Implementation of a new model for maintenance and repair management (MRM) project at Mangistaumunaigas

JSC» in the upstream segment. Under the project, the Company automated MRM processes: an operational and strategic management tool was implemented through the planning of schedule for planned production repairs of equipment on an annual and monthly basis, as well as the prioritized implementation of critical work. KMG introduced a mechanism for generating operational and analytical reports based on data on planning and control of maintenance costs and costs to repair oilfield equipment.

In the downstream segment, KMG completed the project “Implementation of Production Planning Optimization at KMG Refineries” based on the software “Spiral”. It resulted in high accuracy of planning, aligned an interaction between the structural divisions of plants and its head office during the business planning process, and ensured transparency of planning. The planning process is managed at the corporate centre level. Given the introduction of production planning optimization, KMG already recoded the improved yield of oil products. This is expected to contribute to cost reductions and better competitiveness of refineries.

Another project in the downstream segment is Transition of refineries in the Republic of Kazakhstan to a 3-year overhaul period (including maintenance and equipment repair management system). It created conditions to increase the volume of oil refining, reduce repair costs, reduce the risk of emergencies, as well as allow shutdowns of refineries for repairs not in every year, but every three years.

In 2019, three new projects were added to the Digital Transformation Portfolio: Implementation of the Lean 6 Sigma programme in the Oil and Gas Production business segment, Implementation of an Information Security Management



System, and Travel Management. The applied systematic approach to the formation of the DTP Portfolio stimulates business units to initiate new projects that provide real benefits.

The development of KMG Digitalisation Strategy is planned for 2020. The document will determine priorities for the implementation of digital technologies in KMG Group reflecting its value chain. It also will identify opportunities and evaluate the potential effect of digitalization and indicate the focus within business segments and projects.

Under the development of the Digitalisation Strategy, an initial assessment of digital state at KMG will be carried out. With joint efforts with the business units, KMG transformation and digitalisation unit will start developing and detailing initiatives which will be integrated into the Roadmap and focused on digitalizing critical business processes.

Under the Strategy implementation, each KMG subsidiary will develop its digital technology implementation programme. At the corporate centre level, digitalisation will focus on the implementation of “end-to-end”, “integration”, and system-methodological projects.

In line with the new approaches, KMG plans to continue the implementation of two major initiatives of Digital Transformation - Smart Field, and Transformation of the main business functions of ERP (ERP).

The purpose of the Smart Field Programme is to build a system for managing the field development process and production control to maximize the economic efficiency of field and increase the life cycle of oil reservoir. At present, KMG develops the Development Concept for the implementation

of the Smart Field Programme, which will determine the unified approaches for the selection, design and implementation of processes and technologies under the Smart Field project at KMG.

On the ERP side, in line with the new approach, ERP will transform to the Programme of projects, under which instead of a single installation for all subsidiaries and affiliates, the implementation of the ERP system based on the S4/HANA product will be carried out through standardization of business processes of divisions (master plans) and testing at pilot subsidiaries.

During 2019, KMG prepared a solid foundation for the implementation of Digital Transformation, increased the involvement of project sponsors, and ensured the continued efficient implementation of key transformational initiatives.