
etton
SmartField
Oil & Gas Digital Ecosystem

Industry Challenges

Increasing share of unconventional resources

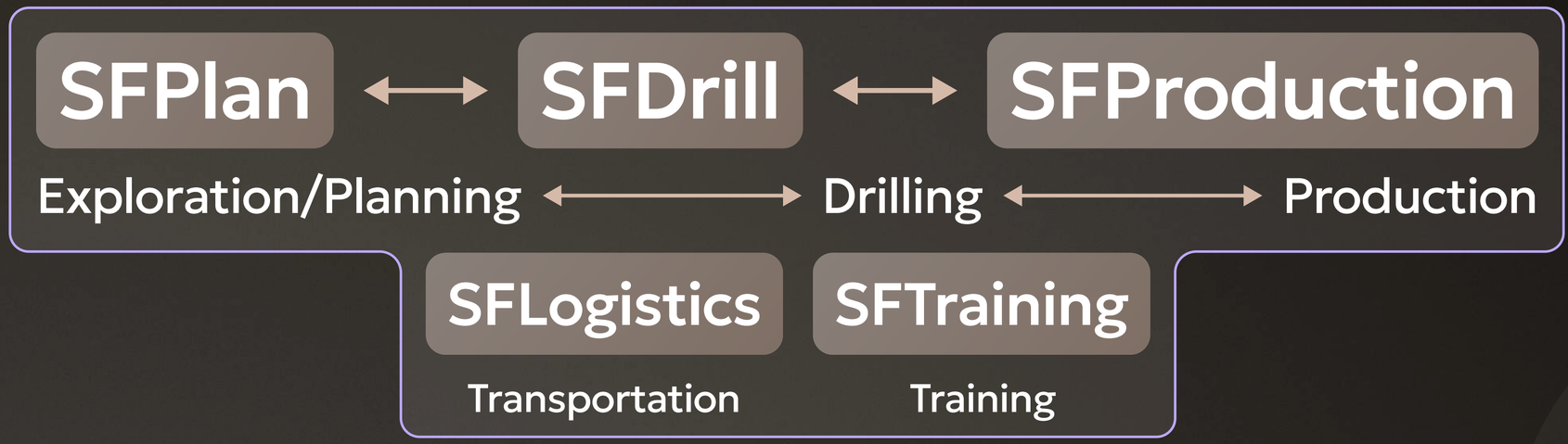
Rising production costs

Complexity of drilling design under geological uncertainty

Data decentralisation: geology, drilling, and production data stored in different systems and formats

High investment risks

Unified Ecosystem — SmartField



SFPlan

- Exploration
- Reserves Forecasting
- Investment Assessment

SFDrill

- Geological Analysis
- Production Rate Forecasting
- Well Design
- Equipment Selection

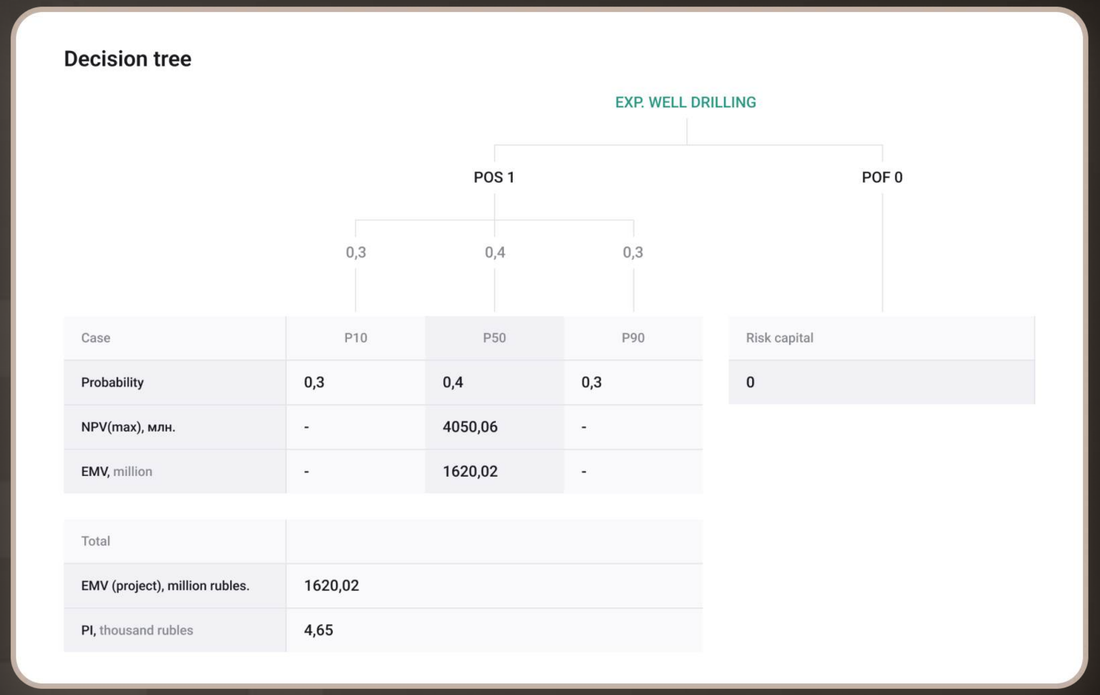
SFProduction

- Field Development Management
- Enhanced Oil Recovery (EOR) Recommendations
- Equipment Optimization
- Geological and Hydrodynamic Modeling
- Economic Assessment

SFPlan

Challenges Addressed

- Preliminary reserves estimation using innovative exploration technology
- Probabilistic reserves and production profile forecast (P10, P50, P90)
- License areas ranking by investment attractiveness
- Technical and economic feasibility
- Cartographic support of exploration stages, including structural framework modeling based on seismic analysis or exploration drilling results



Case	P10	P50	P90
Probability	0,3	0,4	0,3
NPV(max), млн.	-	4050,06	-
EMV, million	-	1620,02	-

Risk capital
0

Total	
EMV (project), million rubles.	1620,02
PI, thousand rubles	4,65

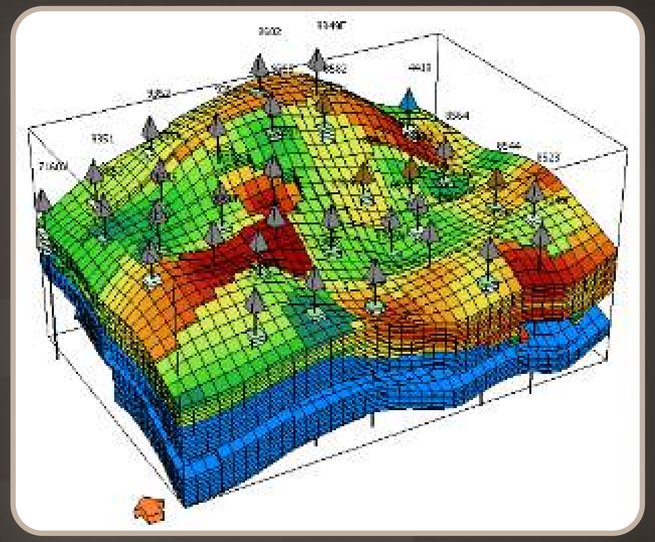
Effects

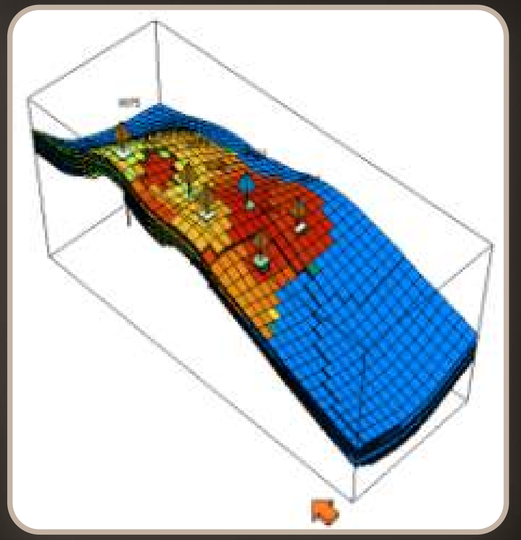
- Narrowing down Investment risks
- E&P investments optimization
- Effective data acquisition of initial geological information on the explored area, including identification of tectonic structures and formations

SFPlan

Challenges Addressed

- Selection of production method, operating mode, and design of optimal well location
- Well performance modeling: IPR/VLP, inflow profile calculation, selection of ESPs, gas lift, and natural flow
- Analysis of geological structure, 2D/3D visualization of reservoirs and formations
- Creation of 3D geological and hydrodynamic models
- Economic evaluation of different development scenarios





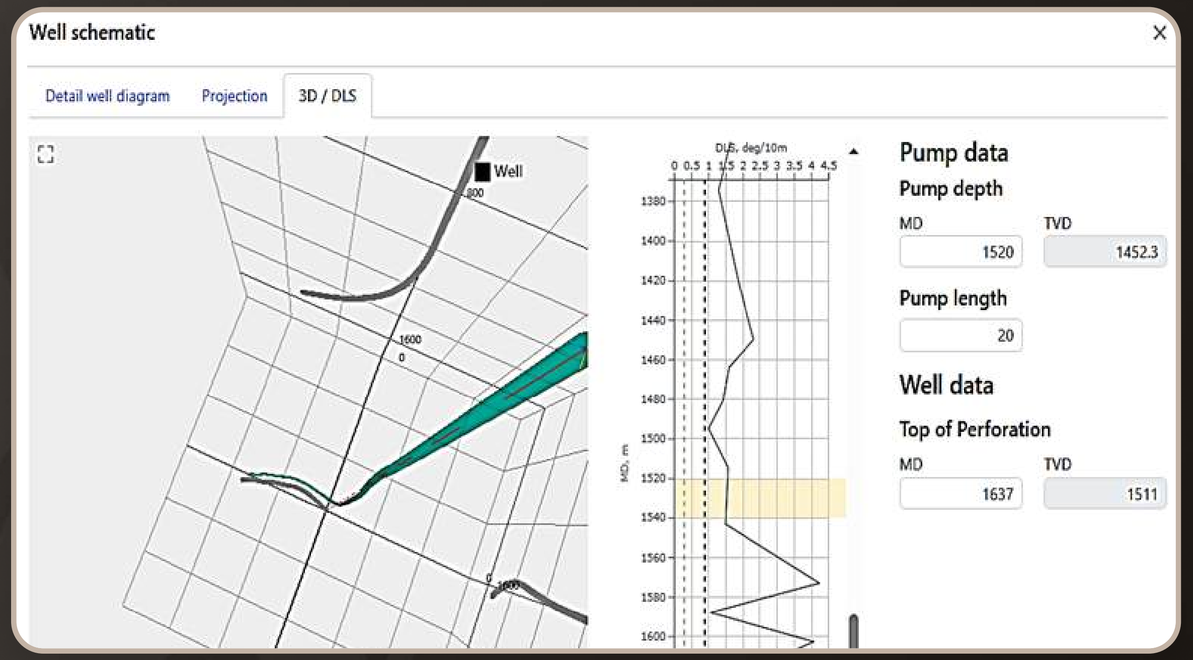
Effects

- Investments risks reduction
- Oil recovery factor increase
- Ability to perform multi-scenario analysis and select the optimal strategy
- More accurate forecasting of production rates and production launch timelines

SFDrill

Challenges Addressed

- Selection of optimal drilling zones, including horizontal wells and sidetracks
- Drilling recommendations with forecasted production (accuracy 65–75%)
- Identification of “challenging zones” and project adjustments
- Support for selecting optimal locations for sidetracks and horizontal wells
- Equipment and drilling method selection



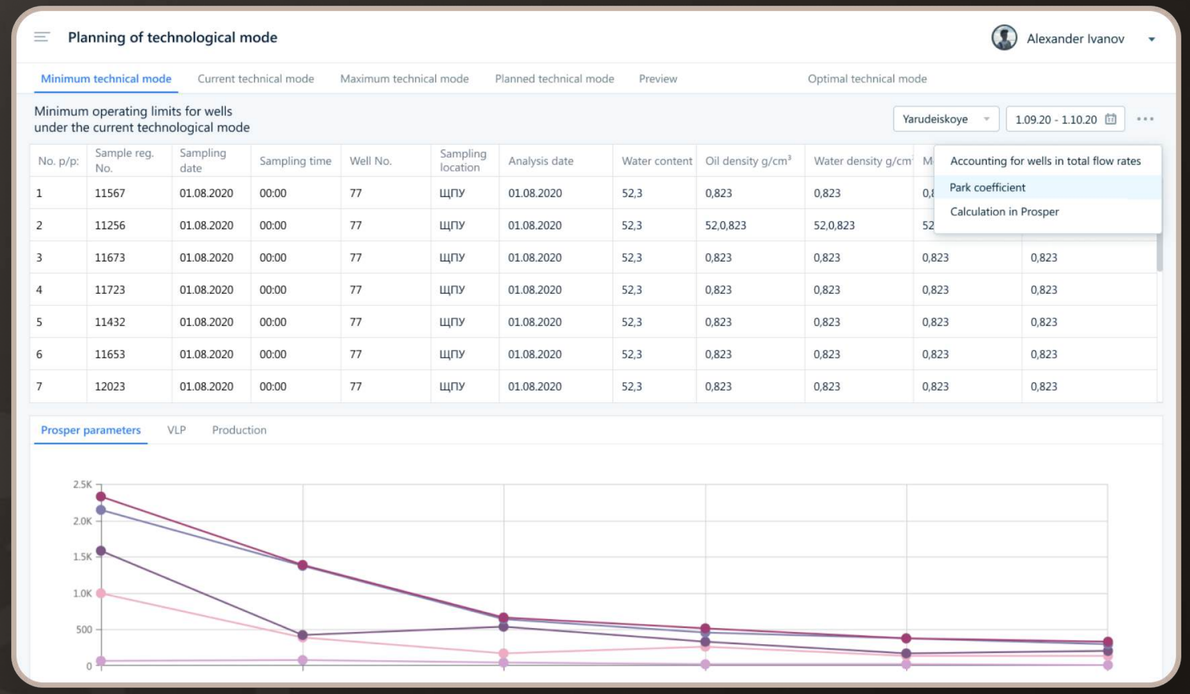
Effects

- Reduction of drilling costs through trajectory optimization
- Increased probability of encountering productive formations
- Decreased risk of accidents and unplanned work
- Shortened well construction timelines

SFProduction

Challenges Addressed

- Wells and field data real-time monitoring
- Identification of production losses and causes of declining performance
- Recommendations for enhanced oil recovery methods
- Well performance modeling: selection and optimization of pumping equipment
- Preparation of reporting materials for management decisions, field reports, and regulatory maps



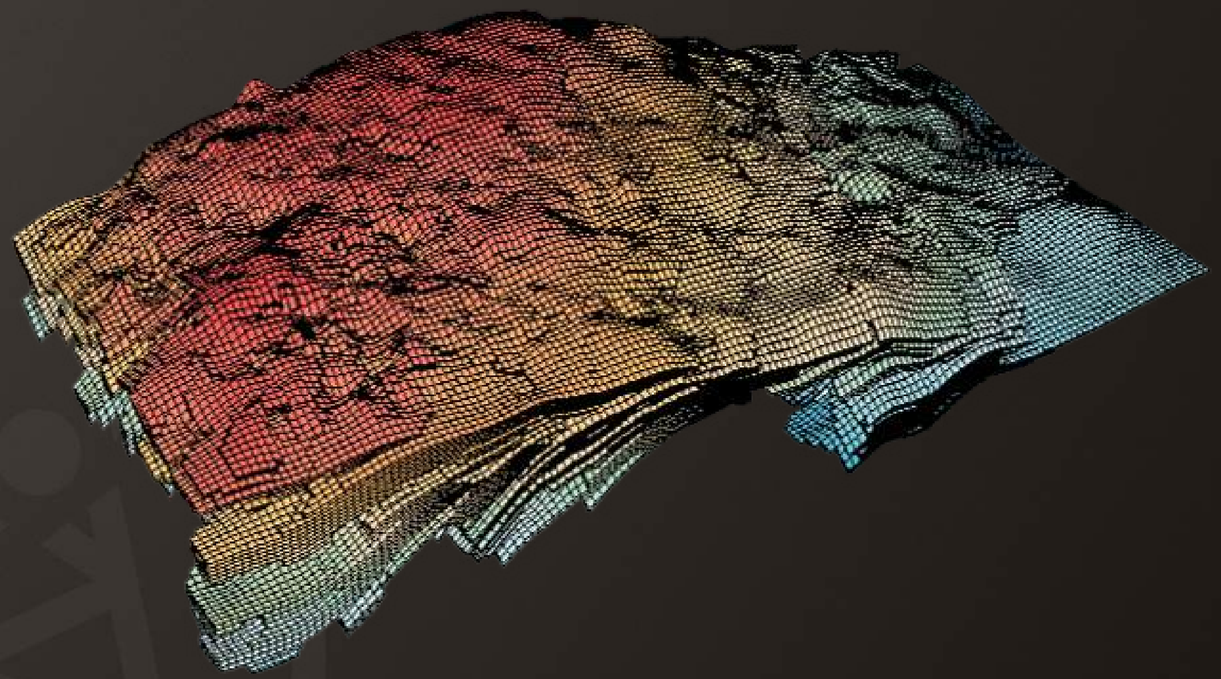
Effects

- Increase in oil production and reduction of production costs
- Wells and OPEX optimization
- Reduction of production losses and equipment downtime

SFProduction

Challenges Addressed

- Workover recommendation
- Localization of problematic zones, selection of reservoir treatment to optimize production and reduce water cut
- 2D/3D visualization of geological structure, recovery factor analysis
- Operational geological and hydrodynamic modeling
- Economic assessment of well performance workovers (efficiency indicators, operating costs, economic effectiveness)



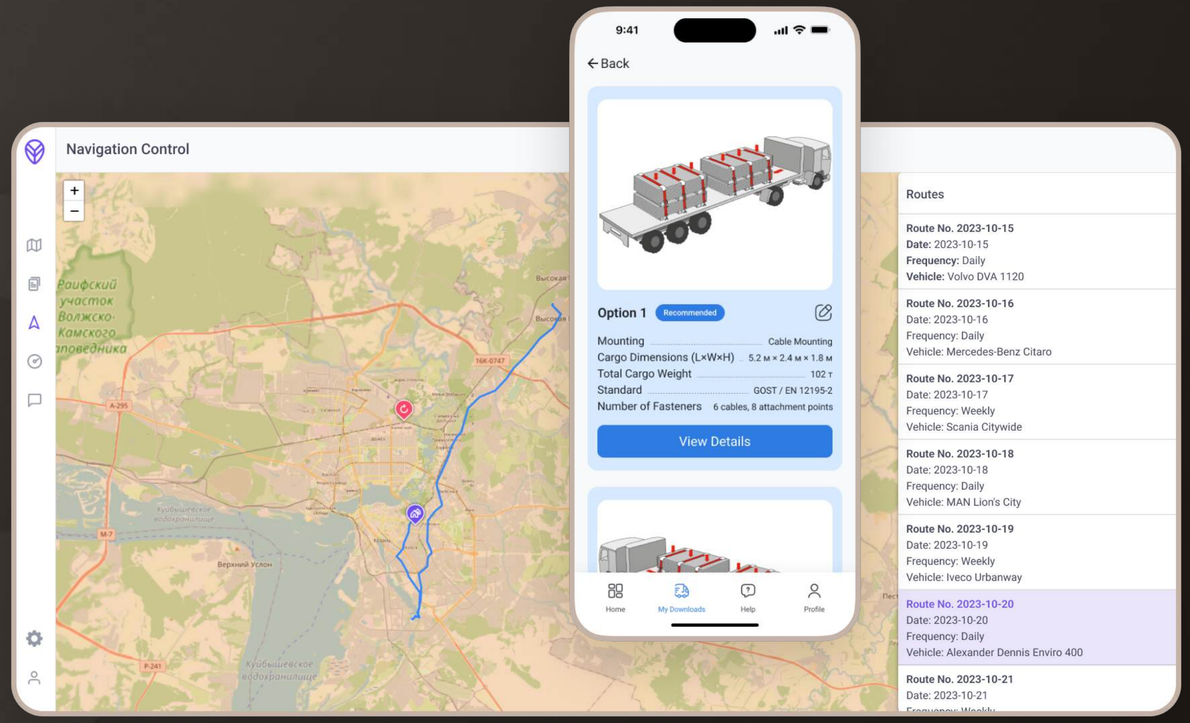
Effects

- Increased efficiency of workovers and waterflood optimization
- Faster decision-making through data consolidation on a unified platform
- Improved processes reliability and manageability

SFLogistics

Challenges Addressed

- Selection of optimal routes
- Real-time monitoring of vehicles
- Tracking actual cargo volume and weight
- Routing of maintenance crews
- Selection of locations for transport hubs
- Optimization of cargo distribution and securing processes



Effects

- Route optimization
- Enhanced monitoring and violation tracking
- Minimization of transportation costs
- Optimization of the transportation process through efficient use of cargo space

SFTraining

- Digital twins and operating training simulators for downstream facilities
- Dynamic process models and control system emulator
- Simulation of various technological scenarios across the full range of process parameters

SmartField Ecosystem Benefits

- Increased production: **10–14%**
- Reduction of CAPEX due to design errors: **15–25%**
- Decrease in OPEX: **up to 10%**
- Improved drilling efficiency: **15–25%**
- Shortened design timelines: **1.5x faster**

SmartField

SmartField transforms fragmented data

into a managed production process

with measurable business outcomes

in a unified digital environment