

Driving Digital Transformation in Oil & Gas

“Measurable digital value is achieved only when profound business understanding is combined with deep operational insight and industry expertise.”

THE INDUSTRY CHALLENGE

Oil and gas companies face systemic complexities when implementing digital transformation strategies. Technology landscapes are often fragmented and poorly integrated, leaving operational, enterprise, and analytical systems disconnected. This leads to siloed workflows, inconsistent data, and limited visibility across assets. Many processes remain manual and outdated, increasing operational risk and slowing decision-making. As a result, organizations struggle to achieve real-time transparency, limiting the impact of digital initiatives and reducing business potential.

WHAT IS D-PACT?

D-PACT is a digital transformation methodology designed to support oil and gas companies in developing and executing digital transformation strategies aligned with business priorities and asset characteristics. It provides a structured way to align digital capabilities, production performance, and corporate strategy, ensuring that digitalization initiatives are economically justified and operationally relevant.

D-PACT enables organizations to:

- Assess digital maturity across assets and value chains
- Identify and normalize technology opportunities across asset portfolios
- Prioritize initiatives based on readiness, and business impact
- Build realistic, ROI-driven digital roadmaps

WHAT D-PACT STANDS FOR

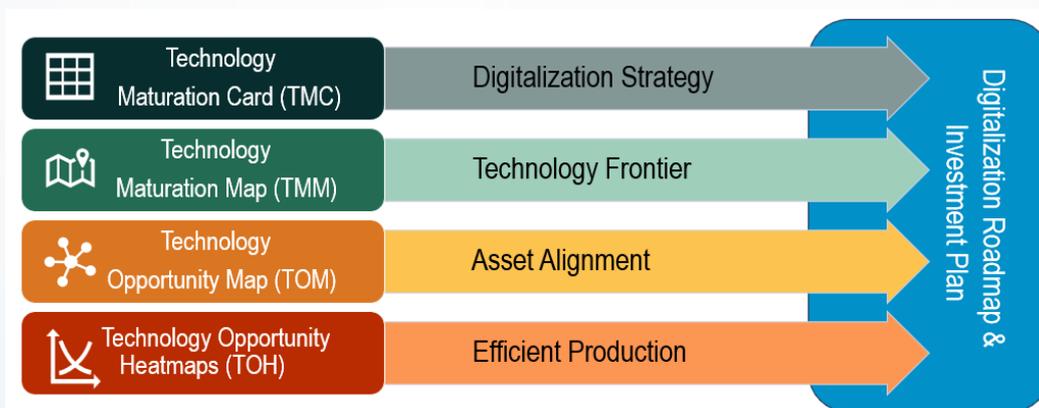
PACT connects operations to strategy, ensures safe and profitable growth, and delivers measurable results. Digitalization is the driving force behind P, A, C, and T:



- D – Digitalization.** Building a coherent, transparent digital and data foundation.
- P – Production.** Real-time optimization of wells, facilities, and assets.
- A – Alignment.** Connecting operational decisions directly to strategic priorities.
- C – Control & Compliance.** Ensuring safety, profitability, and governance.
- T – Targets.** Driving measurable improvements in efficiency, cost and performance.

KEY DELIVERABLES

D-PACT delivers tangible, quantifiable, decision-ready outcomes. Using multi-metric rankings, it systematically compares technologies, assets, and opportunities to support transparent, data-driven decisions. Technology opportunity heatmaps highlight the extreme points — where a specific technology best fits a specific asset — creating clear priorities for action. Asset-level roadmap and governance framework guide investment, deployment, and value realization.



Technology Maturation Card – A concise assessment of technology’s maturity, readiness, and value potential.

Technology Maturation Map – A visual overview of relevant technologies across maturity stages.

Technology Opportunity Map – Translates technology potential into asset-level value opportunities.

Technology Opportunity Heatmap – Ranks Technology–Asset combinations to identify high-impact, high-priority initiatives.

Digitalization Roadmap & Investment Plan – Are a budgeted, actionable strategy focused on ROI.

ABOUT BAYSDATA

BaysData R&D (www.baysdata.com) is a boutique consulting company that provides services to solve complex petro-technical challenges and achieve the most ambitious goals of its customers. The expertise of the team allows them to implement integrated projects to support the whole range of disciplines from exploration to production optimization. Please get in touch with us to learn more.