

Digital Business Consulting and Technology Services

Renewed **Urgency** in Oil & Gas for Digital **Transformation**

How Oil & Gas companies can build resiliency and lead the path towards a sustainable future

Executive Summary

This Whitepaper discusses:

- Future of Oil & Gas; Cost Optimization, Decarbonization
- Digital Investment pillars
- Navigating regulatory compliance
- Upskilling in an inclusive agile culture
- Digital is the path to Operational Excellence
- Thynkli's Digital Centre for Operational Excellence in Oil & Gas



Future of Oil & Gas; Cost Optimization, Decarbonization

Aggressive decarbonization goals in the Oil & Gas industry emphasizes the role of Oil & gas in the future of energy. From decades of trial and error, oil and gas is at last equipped with capabilities for transformation. The urgency for innovation is more pressing than ever; as we are faced with major societal, technological, and political change - it is important for Oil & Gas companies to reduce their carbon footprint and drive transformation towards sustainability, all while faced by volatile markets that is forcing Oil & Gas to tighten budgets.

Implementing technology in Oil & Gas has **enabled savings between \$60M to \$100M** through optimized operations. What if you can design an innovative business model to digitalize & redefine the core of your business and enable decentralization and agility. The approach will attract workforce and government policies to serve the goals of your business instead of constant threats to the core of your business model.

In this paper, we will cover how to utilize technology to enable operational resilience and sustainability to enforce the role of Oil & Gas in the future.

Digital Investment pillars

We realize that digital transformation comes with risks of failure due to strong silos in Oil & Gas today. At Thynkli we leverage technology to achieve business outcomes, therefore we focus on the following investment pillars:

Platform as a service: In order to achieve a comprehensive value chain across the enterprise, technology investments must enable maximum ROI on legacy systems and integrate business applications to create a solution that reflects your organization from the bottom up that is supported by real-time data. This approach brings a level of transparency to your investors on the proactive approach to meet sustainability targets.

Digital Thread: Sharing data across business units and breaking down systems in silos is a top priority until transformation has been achieved at scale. The purpose of a digital thread is to shift from a solution design to a system design. Creating a digital thread in your organization that contains platform support instead of application support will allow data to serve business outcomes from readily available data sources, provide transparency to create continuous improvement opportunities, lower cost, and drive long-term value. A digital thread will incentivize investors to discover ROI and steer the business towards sustainability.

Partnership Ecosystems: Systems design include complex operations that have a high level of dependency on internal/external stakeholders, systems, and partnerships. In order to sustain business continuity, decrease dependency and drive innovation at scale, key partnerships need to be established within the industry to ensure capabilities of continuous design and support are available throughout the digital transformation journey. Key partnerships include software developers, technical distributors, system integrators, OEM providers, and technology partners.

Flexible & Agile Implementation: Agility in operations is necessary to keep up with the speed of change and demonstrates flexibility, which is attractive to investors. Implementing technology in an agile framework is common in the industry, although the pace of adoption has been a challenge, despite the software-as-a-service model that encourages higher adoption to control cost. Embedding agility in your organizational culture is necessary to increase business resilience. In the face of disruption, it is important to have an agile technology framework, as well as the mindset and processes that support business agility.

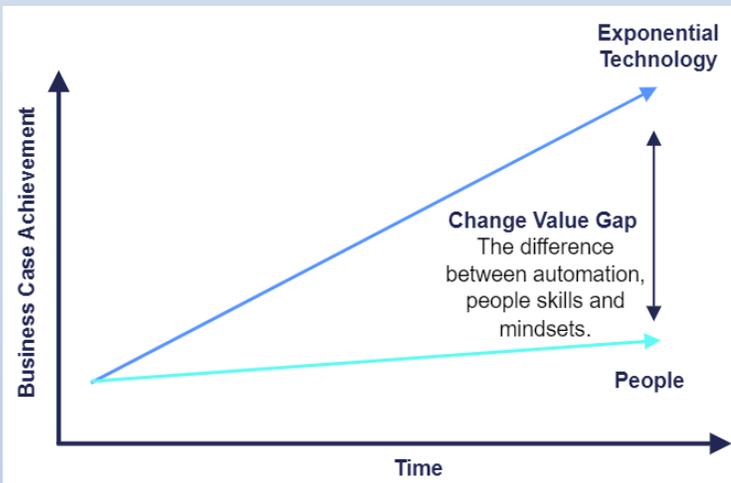
Up-skilling in an inclusive agile culture

An agile inclusive culture can be achieved in milestones as there is no low hanging fruits when it comes to change. Change takes time, patience, and a clear vision. A clear vision is necessary to ensure the inclusion of front line workers. Our approach is to prioritize strategy and alignment. The sustainability challenge is steering new generations away from Oil & Gas, and the knowledge gap makes it hard to transfer and retain knowledge in the industry. Thus, we have to put people first. After you have invested in several technologies, create your own organizational feedback loop to receive and send information from/to the people on the field to enable collaboration and create standards for achieving competitive advantage. Leverage technology to facilitate human interactions and speed up upskilling. Encourage the Oil & Gas workforce to be tech savvy and feel empowered to solve problems, which increases ROI as the investment in people increases. Technology provides the edge and demonstrates capabilities to attract and retain talent. Upskilling occurs when people are included in the change process and investment in their development is demonstrated.



Navigating regulatory compliance

The need to document and audit compliance of new environmental regulations and emission targets is continuously rising. Demonstrating a proactive approach towards regulatory compliance requires establishing rigorous reporting mechanisms in your operations. With technology investments today, data is available to be used in context of any desired business outcome including regulatory compliance. Process mining tools and data analytics allow for the identification of critical processes that affect compliance to discover opportunities for automation and optimization. Despite the technology capabilities to capture regulatory data, culture is the primary enabler for compliance. Achieve compliance by implementing a strong quality assurance/control process, get proactive, train your employees, and speak the regulatory and compliance language of the government.



Digital Governance is the path to Operational Excellence

While Robotic Process Automation (RPA) is a straightforward application that continues to achieve significant strides in operational excellence, there are large varieties of processes from simple to complex business processes that require governance & data sharing across systems and business units. Despite RPA's contribution to operational excellence, poor ROI, lack of alignment, siloed usage, and the inability to scale are often showstoppers. In order to maximize ROI on RPA implementation and achieve operational excellence from all technologies, breaking data in silos is necessary which requires governance. Governance is difficult to achieve when there is no visibility on security requirements, and alignment across business units, therefore, establishing a data sharing structure will encourage collaboration, and produce repeatable, predictable results



Thynkli's Digital Centre of Operational Excellence

At Thynkli, we understand the importance of turning up the dial of the Oil & Gas digital transformation to build the future of energy and help innovate as well as lead strategic business change towards sustainability. We deploy a series of assessments, techniques, and cultural hacks by leveraging technology to connect all layers of the organization, design multidisciplinary teams to coordinate information sharing across business units and build an agile data-driven culture. The path to sustainable operational excellence requires an investment on all fronts: in **data, process, and people**. With our approach, you can maximize ROI on existing technology investments, align digital initiatives with business outcomes, build digital capabilities and achieve repeatable predictable results.

Think Big.



Pilot Small.



Adopt Fast.

Contact Us To Start Your Journey