

BARRIERS TO DIGITAL TRANSFORMATION IN RENEWABLES

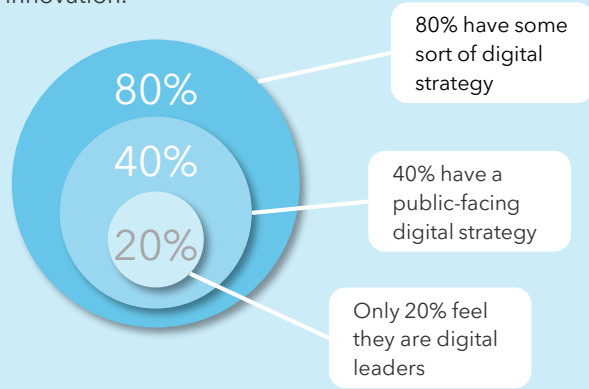


BACKGROUND

DNV GL polled ~2,000 professionals from the energy industry, representing a range of sectors, business sizes, and functions. We asked the respondents about their digital transformation strategies: *What, why, and how?*

DIGITAL STRATEGY

Companies are implementing digital strategies with the goal of increasing operational and cost efficiency, facilitating better decision making, and fostering innovation.



OVERALL BARRIERS



Lack of digital mindset



Lack of digital skills



Competing internal priorities

TECHNOLOGY-SPECIFIC BARRIERS



Technology uncertainty: Solar technology is still changing rapidly. As such, many new digital technologies are still unproven, making business cases hard to prove and investment risky.

System diversity: The development of solar projects, with components sourced by different OEMs, presents a barrier to developing digital tools compatible with the various configurations.



Access to and sharing of data: A reliance on big data technology to shift from reactive to predictive has highlighted the continuing challenges with accessing and sharing data.

Operationalizing pilot projects: Many technologies remain in the piloting phase, with one-off projects. To realize their value, these tools need to be integrated into day-to-day operations.



Technology uncertainty: Similar to solar, digital tools for storage technology are yet unproven and rapidly changing, making business cases hard to prove and investment risky.

Cyber Security: The required versatility and lack of industry standards makes cyber security a particular challenge for storage technology.

MOVING FORWARD



Clear corporate strategy

A well-developed and communicated digitalization strategy will reduce internal competing priorities and foster a digital mindset to encourage adoption of digital tools.



Data management standardization

Standardization will allow digital experts to create innovative and scalable tools for the industry. Clear data management protocols will also help address cyber security concerns.



Engagement of all stakeholders

To foster a digital mindset and general comfort with digital tools, all stakeholders, including the future end users should be engaged as new tools are developed or evaluated.



Digital + domain training

Technical curriculum for technicians and engineers should include a digital component to enable them to leverage their domain expertise to contribute to digitalization efforts.

