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Subsea to Renewables

People, Data & the Energy Transition: Navigating Digital Transformation in Renewables

*“People are **far more important** part of the picture in getting any industry to a successful level as compared to just the technologies.”*

— Dr. Hema Wadhwa

◆ 5 KEY TAKEAWAYS

01

PEOPLE MAKE OR BREAK DIGITAL TRANSFORMATION

Technology alone doesn't drive change — the people who must adopt it do. A multi-million dollar investment fails the moment operators say “the login didn't work.” Win their trust first. Build with them, not for them.

02

CLEAN DATA BEFORE YOU PROMISE AI MAGIC

Fragmented, siloed data from different platforms can't power predictive analytics or AI. You can't have someone “pressing a button in the back end” to clean up before it works. A solid data foundation must come first.

03

RENEWABLES DEMAND A NEW APPROACH TO SCALE

One gas turbine = one asset to monitor. One wind farm = 100 turbines, each with its own platform, each using a different colour for “offline.” Standardisation and unified views are not nice-to-haves — they are the business case.

04

DATA OPTIMISATION DIRECTLY SUPPORTS SUSTAINABILITY

Getting just 1% more output from an optimised asset means fewer total assets are needed to meet energy demand. Wasted data storage has a real environmental cost too — unused data on hard drives isn't neutral.

05

THE REAL COST IS EXPERTISE, NOT STORAGE

Storage costs are low. The cost barrier in renewables digitalisation is the human expertise required to make it work — and those costs have a wide range depending on who you call first. The answer is scalable, standardised solutions built for multiple assets, not bespoke per-site projects.

◆ INDUSTRY INSIGHTS

TRUST TAKES TIME

It took Hema over a year to bring operators on the journey — from “Are you here to take my job?” to sharing coffee and asking “Can we do this in

ROLE-BASED DATA VIEWS

One source of truth, viewed differently by role. Operators need alarms and fixes. Executives need asset-level decisions. The same data, presented to guide the

PREDICTIVE = PROFITABLE

Predict a gearbox failure 3 months out: order parts, book the crane, schedule around low-wind days. What was an unplanned outage becomes a planned

◆ QUOTABLE MOMENTS

If people don't come on the journey, you could put multi-million dollars into it and all they have to tell you is ‘the login didn't work’ — and everything goes away.

— Dr. Hema Wadhwa

It's not that they need to learn how to use what we give them. The design has to go towards what people need.

digital?" Trust is built in small steps.

right action for each person.

maintenance window — maximising uptime and revenue.

— Dr. Hema Wadhwa

Not many generations had the opportunity to have energy transition and digital transformation at the same time. We're pretty fortunate to be in the workforce at this point in time.

— Dr. Hema Wadhwa

There's endless opportunities here — and you could actually make a difference, because there's so much to do and change for better.

— Dr. Hema Wadhwa, Final Thoughts

◆ ABOUT DR. HEMA WADHWA

Dr. Hema Wadhwa leads data analytics for asset management and performance in renewable energy. Her career spans floating production systems engineering in subsea oil & gas through to digital operations leadership in renewables — a journey driven not by plan, but by curiosity and opportunity.

With a PhD from UWA and executive education at MIT Sloan, she works at the intersection of digital transformation and the global energy transition — a combination she calls a “once-in-a-generation” opportunity. She is a passionate STEM champion and a lifelong learner.

Connect with Dr. Hema Wadhwa on LinkedIn — link in the show notes.

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