BACKGROUND

Project ARIES is transforming PETRONAS from the inside out, towards agile, digital-savvy organization, focusing on outcome-based delivery model and unlocking greater value to PETRONAS, turbo-charged by engineering and advanced analytics.

Current State

Aspired State

Untapped Data

Rigid Engineering

Fragmented Information

Refocus engineering from delivery-based to value-based

Universal aggregator technical insights

Engineering agility & flexibility

OBJECTIVE

Creating replicable and scalable solutions and nurturing capabilities that set PETRONAS up for long term, sustainable success by building new Techo-Digital work process and capability

Delivery of Impactful Engineering Solution Factory

Creating solutions backed by engineering and data

Identifying opportunity

Stress testing solutions

Project ARIES

"Generating Value through Data"



METHODOLOGY

Delivering "data-backed, value focused" techno-digital engineering solutions at pace

1. Engineering Consultancy Driving Innovation, realizing digital

Cross functional

collaboration to literate and deploy

2. Plant Facing Solution

delivering high value-creating engineering solutions

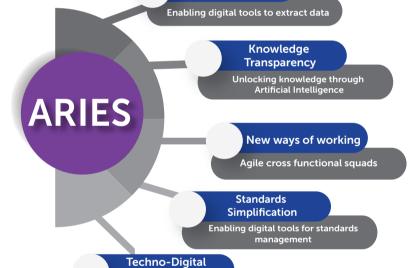
3. Project Facing Solutions
Improve project viability by driving down cost

End-to-end work process integration



Generative Design; New insights for optimal concept and cost

Agile engineering at scale across projects



Efficiency in Delivery

Value Hunting

Identify tangible value potential through domain + digital

Solutions Development & Deployment

Deliver tangible value project through domain-digital solutions

Product Ownership

Manage digital product & roadmap to sustain & scale value

Ex

Execution Pilot

Integrated squads to execute pilots for Digital Twin and Smart Plant & Facilities

RESULT

World Economic Forum (WEF)
Selected as the finalist for WEF
lighthouse certification

Factory

Assembly line for pace in delivery

Techno-Digital Plant Solution

solutions in 10 months

Plant-wide CO2
Emission reduction

*3% increase in OEE

*sample operating units (OPU)

Value Obsession Framework

>90% realised cash generation

Change Adoption

76 change interventions with >90% adoption rate

Techno-Digital Factory

45% reusable code blocks

Analytics Translator Plus (AT+)

585 translators

CONCLUSION



Vision

Creating value from data through Techno-Digital convergence



Process

The Techno digital Factory utilising assembly line approach



People

Equiping talents with the analytics translator skillsets