

Paris Session 2022



The effective ways of implementing intelligent IT solutions In the Japanese Electric Power Industry

SCD2
PS1_Q1-06

Which of the following ways of implementing intelligent IT solutions is more effective for the power industry: creating internal R&D departments at energy utilities, working with outsourcing IT-companies and research institutions, working with international IT “giants” providing solutions for the power industry? What is the industry experience?

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Outsourcing or In-house ?

➤ Characters of IT-Companies / Research Institutions, IT Giants and In-house R&D

	IT / RI	IT Giants	In-house R&D
Skillful human resources	◎ only in specific solution	◎	△ employment or limited
Installation cost	◎ if adopting their platform	◎	△ w/ employment cost
Engineering Judgement	△ less flexible	△ less flexible	◎ flexible and quick
Flexibility of customization	△ less flexible	△ less flexible	◎ flexible
Accumulating know-hows	×	×	◎

- Bottleneck in Japanese power industry
 - ⇒ enormous but not-structurally-organized existing data
 - ⇒ exclusive possession of Operational data
 - ⇒ manpower w/ current engineering knowledge to make agile development possible

Group Discussion Meeting

Corporate Consideration on Implementing Intelligent IT Solutions

➤ Operational Data x Intelligent IT Solutions

= to create data-driven decision-making platform

= to discover hidden value among the accumulated enormous data

⇒ Can create Simple models / Mocks-up for In-House

⇒ Can determine which parts produce In-House / which parts Outsource
when creating Full-scale models

⇒ Function of Support for In-House

- To improve processing speed and accuracy

- To save labour and cost

By drawing Blueprint of “to-be” ,
Simultaneous achievement of enterprise future value and current cost ...



Hybrid of Outsource and In-House

Success case of “Hybrid” methodology

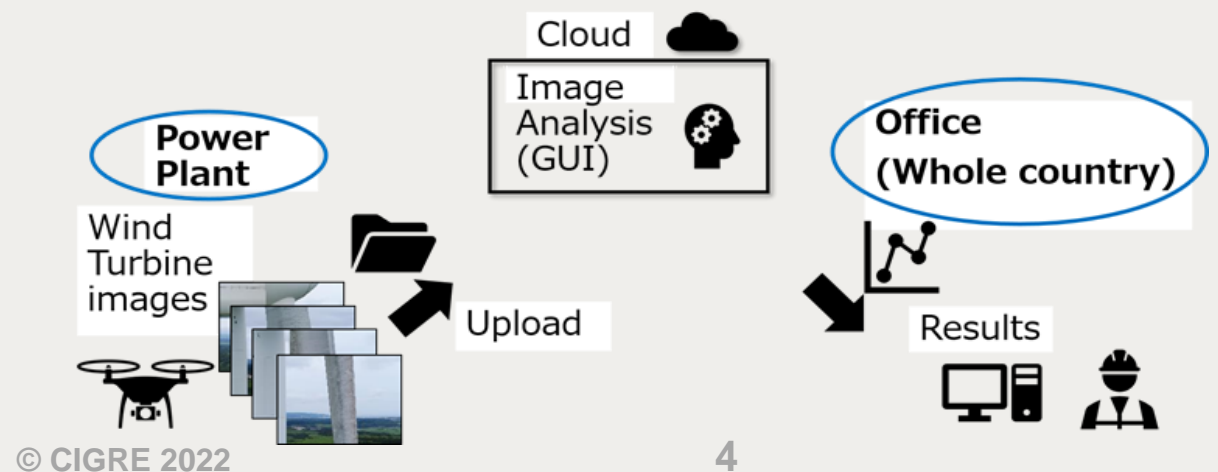
AI-based Anomaly Detection System for Wind Turbine Generator Blades

Program for extracting anomaly images of wind turbine blades taken by auto-flight drones

- Defining requirement, basic design and programming ⇒ In-house
- Programing for GUI improvements, Pre-processing efficiency ⇒ Outsource



- In-house: quick to make engineering decision and flexible to utilize required manpower to reflect the company’s own needs.
- Outsource: to enhance some specific field and acquire skillful manpower



Group Discussion Meeting