

**Deep Dive Workshop on  
Artificial Intelligence and Robotics for Electric Utilities**  
Organized by India Smart Grid Forum

**AI Based Predictive Prescriptive Analytics for  
Transmission & Distribution Utilities**

Presented by

**Tutor: *Dr. Ashutosh Natraj, CEO, Vidrona Ltd***



**Tuesday, 15th June 2021 | 17:30-19:00(India) | 20.00-21.30 (Manila)**



**@IndiaSmartGridF**



**www.indiasmartgrid.org**



**India Smart Grid Forum**

**VIDRONA**

BRITISH AI BASED PREDICTIVE ANALYTICS ENERGY ASSET MANAGEMENT COMPANY



**VIDRONA LTD, UK:**

BRITISH AI BASED PREDICTIVE PRESCRIPTIVE ANALYTICS ENERGY ASSET MANAGEMENT COMPANY

Our Product: It is AI based Analytics Software Platform for utilities (TSO and DSO) on the cloud.

“Increasing return on investments by increased asset life”

[www.vidrona.com](http://www.vidrona.com)

+44 7469231693

**AI INSPIRED PREDICTIVE ASSET MANAGEMENT**

Science & Technology Facilities Council | UK Research and Innovation

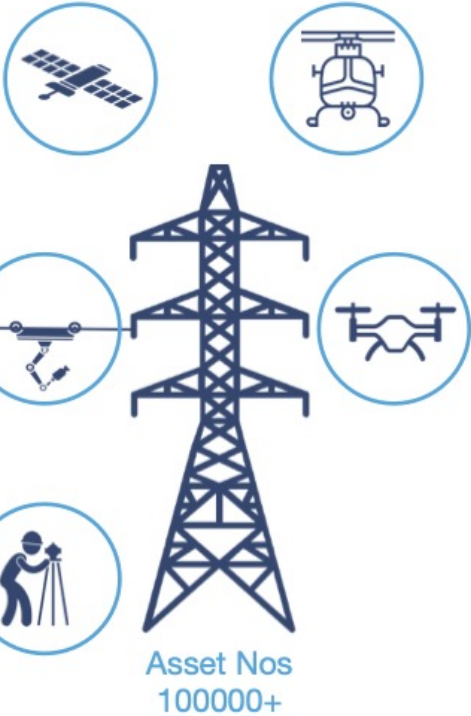
**esa bic UK**





## GAP ANALYSIS LACK OF ANALYTICAL TOOL

### Patrolling/Inspection



Collected Data



Collected Data



Collected Data

TBs of Big Data



### WHAT TO DO WITH THE COLLECTED IMAGERY / DATA

1. Does it provide intelligence ?
2. Does it provide predictive analytics
3. Foresee future faults ?

### COLLECTED IMAGERY / DATA Provides

1. **No Intelligence**
2. **No Predictive analytics**
3. **No Identification of future faults**



What do I **understand** ?  
How **many images** should I see ?

When will I do my O&M job?  
Maintenance Planning ?  
Quality Assurance ?  
Plan New Lines ?



**Manual Monitoring & Inspecting** is prone to **human error, time consuming**. It gives no time to repair/maintain in advance.

?

Customer Assets = 100000+ Ckt KM

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India Smart Grid Forum  
Organizer



Global Smart Energy Federation  
Partner Organization

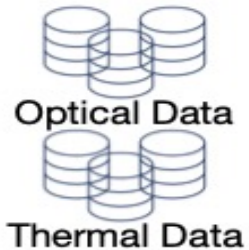


**VIDRONA**

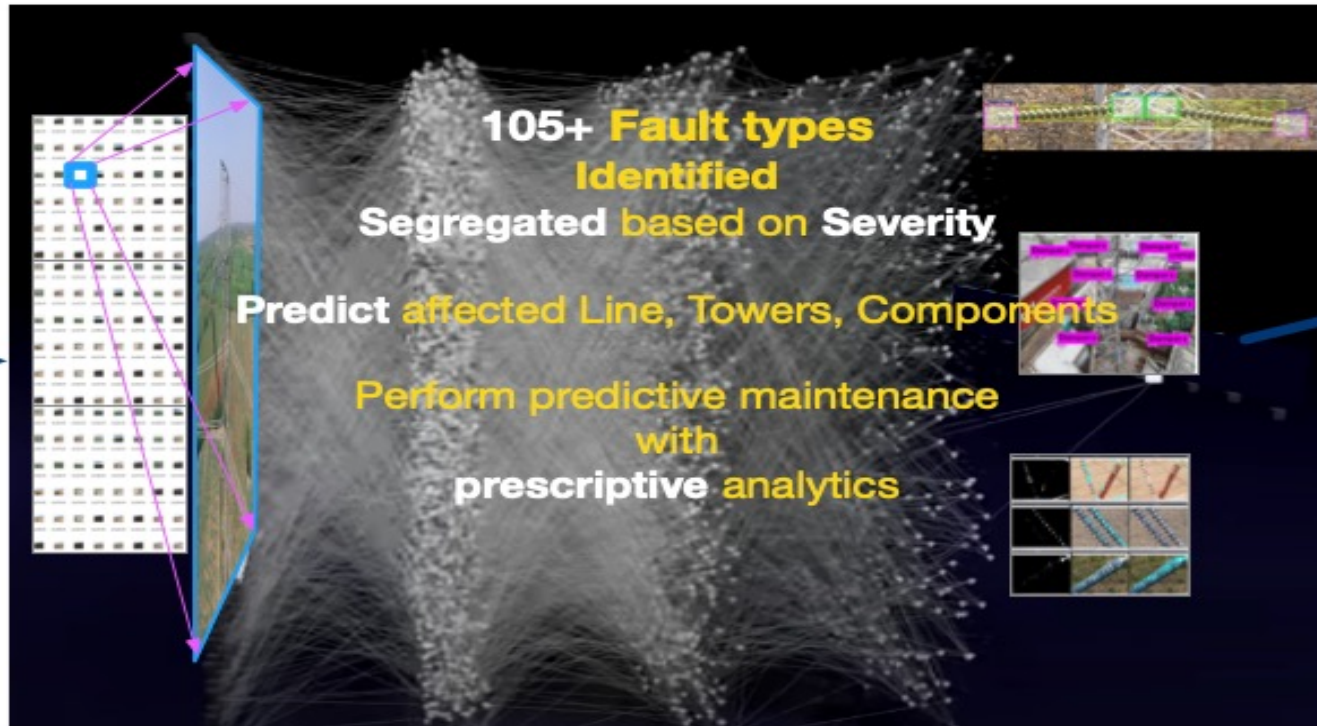
PROPOSED SOLUTION, HIGHLIGHTING ROLE OF SPACE IN THE INNOVATION



Asset Nos  
100000+



TBs of Big Data



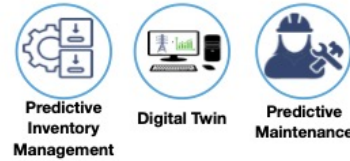
**vSense®**  
"AI based Analytics"  
Software Platform



**CASE STUDY : 1**



**GAP ANALYSIS**  
PRECISION PREDICTIVE ANALYTICAL TOOL



**BETTER PLAN YOUR O&M EXPENSES & RESOURCES**



**Quality Assurance**

- Experience : 5 Years  
Severity Level: 05  
Wrong Judgement - Human Error
- Experience : 10 Years  
Severity Level: 04  
Wrong Judgement - Human Error
- Experience : 25 Years  
Severity Level: 03  
Right Judgement



**AI For Severity : 03**  
**Right Judgement**

Customer benefit from Vidrona Ltd to eliminate false judgment and utilise maintenance money to fix critical Major fault

**Impact of Experience level VS Fault Severity**



**GAP ANALYSIS**  
PRECISION PREDICTIVE ANALYTICAL TOOL



Digital Twin



Quality Assurance



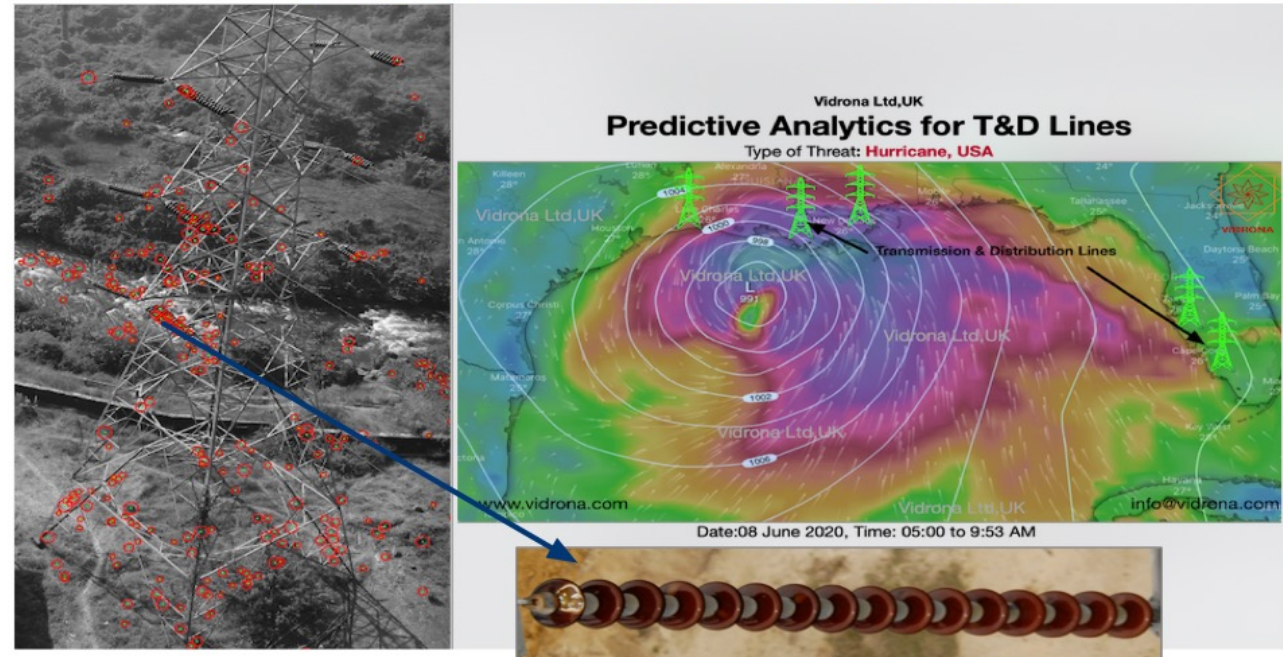
Predictive Maintenance



**Predictive Inventory Management**

**PREDICT FOR TIMELY & CHEAPER PROCUREMENT**

**CASE STUDY : 2**



# Question and Answers

# Thank You

*For discussions/suggestions/queries*

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