



A BRAIN FOR YOUR SENSORS

2015

DiagSense Technology

- **DiagSense** - Prognostics & Diagnostics of evolving failures in mechanical systems and pipelines
- DiagSense is a software which acquires data from sensors and controllers, learns, analyzes and makes decisions about abnormalities in the entire mechanical system. When the algorithm makes the decision that there is an existing or developing problem it monitors and issues alert to the system administrator
- DiagSense is most useful for predictive maintenance which saves (down) time and money



DiagSense Proposal

- Offline pilot for free - Show you DiagSense Capabilities.
- Online pilot at cost price – Online predicted maintenance.
- Operational system deployment – After we alert on any required simulated abnormal event, we will install the **Brain** to integrated with the client monitoring system.

Brain preforms predictive maintenance to save (down) time and Money



Off-line Pilot

- Receive historical data of the monitored object, at its normal operation
- Understanding the data and the parameters we got.
- Finding the object normal behavior formula, at each mode of operation
- Receive a historical data with faulty occasions
- Alert on those faulty event in advance, much before they become a real problem
- at the other hand. you will see that the Brain was not alert on false alarms

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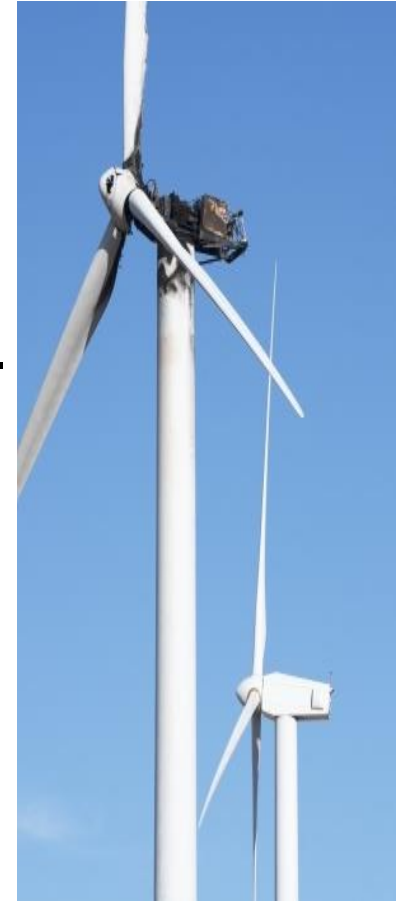
Online Pilot - Demonstration at the client site

- Integrated with the client monitoring system, and taking the raw data directly from the Database
- Repeat the learning phase
- Running simulation of abnormal events - Testing the system and simulate any kind of events.
- The **Brain** reports on evolving failures much before the formation of the real one.
- No false alarm / Low rate of false alarms

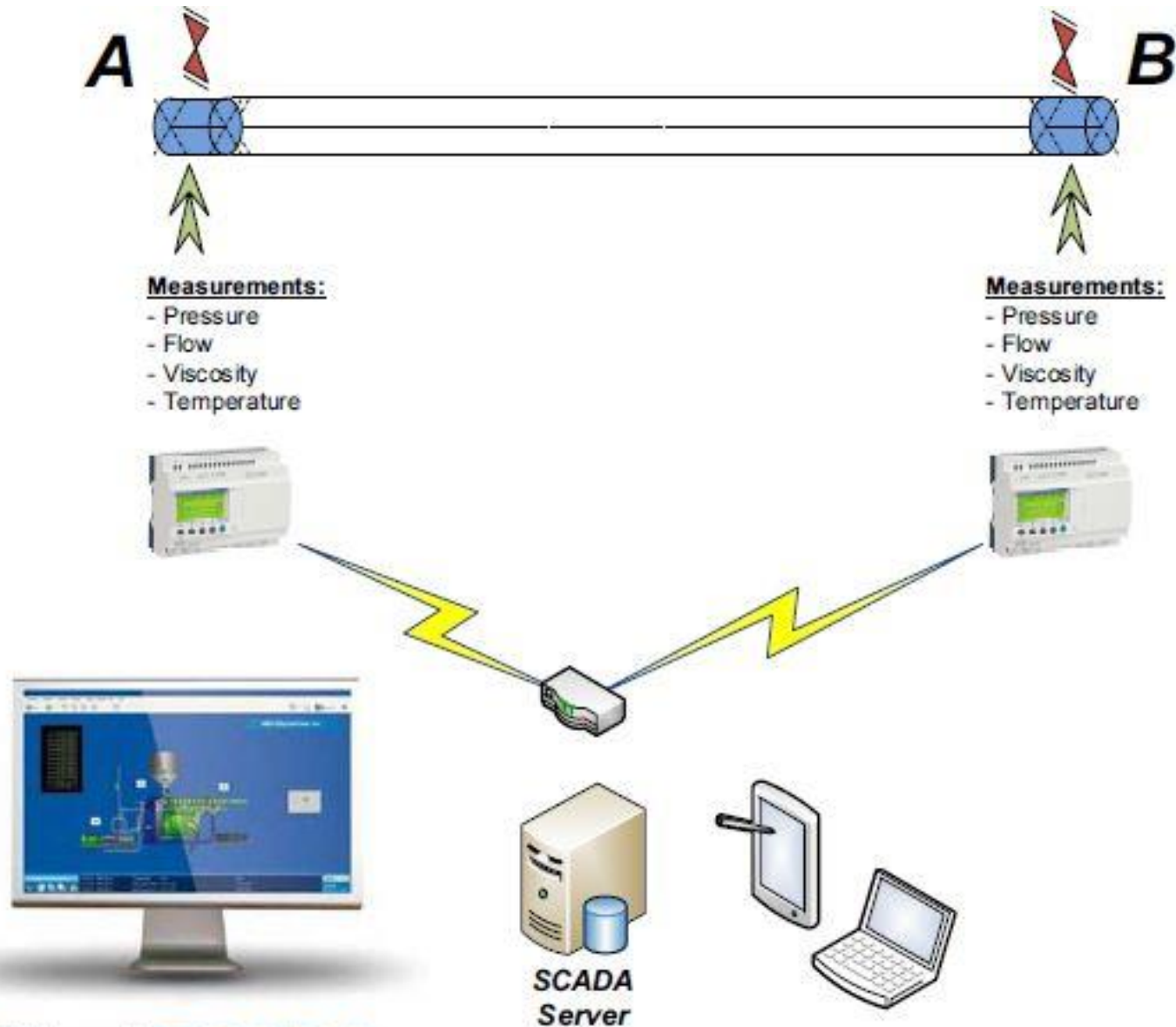


Operational System Deployment

- DiagSense Full Installation:
- No Miss Detection
- Dramatically reducing in false alarms
- Effective performance in transient states:
 - change of operation and pressure regimes.
 - environmental variables and more.
- A scalable software without a need to install additional sensors or equipment.
- 24/7 online operation with no need for calibration even after unreported changes in the conditions.
- Customized GUI.



DiagSense Deployment at pipeline



Profile of the partners

We are looking for partners from the following industries:

- Turbines – inefficiency of power generation
- Liquid pumps – cavitation and vibrations
- Motors – shaft misalignment
- Vehicle – predictive maintenance for engines
- Petrochemical – physical and chemical influence over one another
- Heavy Machinery – pre detection of shaft malfunction
- Any Industry with stationary processes

Thank you!