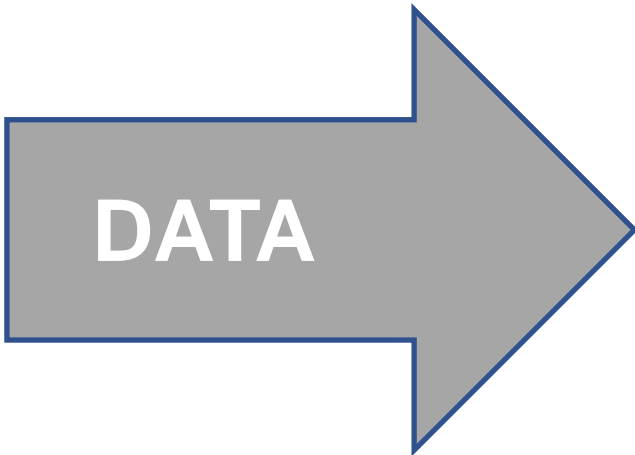




HOE OM TE GAAN MET DATAGEDREVEN ONDERHOUDSTRATEGIEËN? DATA. LESS IS MORE?



CURRENT = INDUSTRY 4.0



CONTROL VALVE RELATED DATA SOURCES



WHERE



WHY...



WHAT





DIGITAL POSITIONER

- Why underperforming?
- Why the wearing?
- Replace at plant stop?

- Requires connectivity



CONTROL VALVE RELATED **DATA SOURCES**

- Early failure detection
- 24/7 observing the process
- All control valves
- All assets
- Requires existing data, no infrastructure



PREDICTIVE MAINTENANCE SAVINGS



Lower maintenance costs



Improved safety



Value of additional production

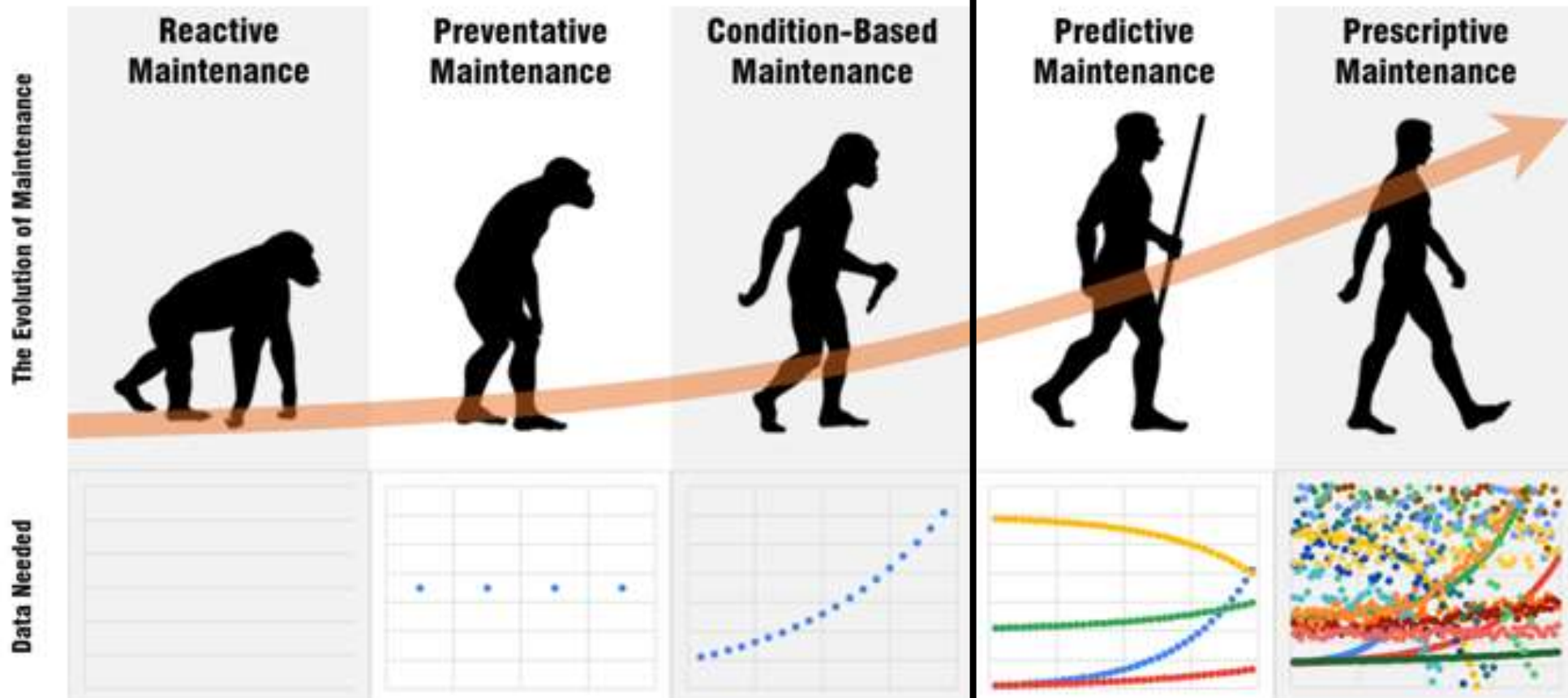


MAINTENANCE STRATEGIES



Traditional

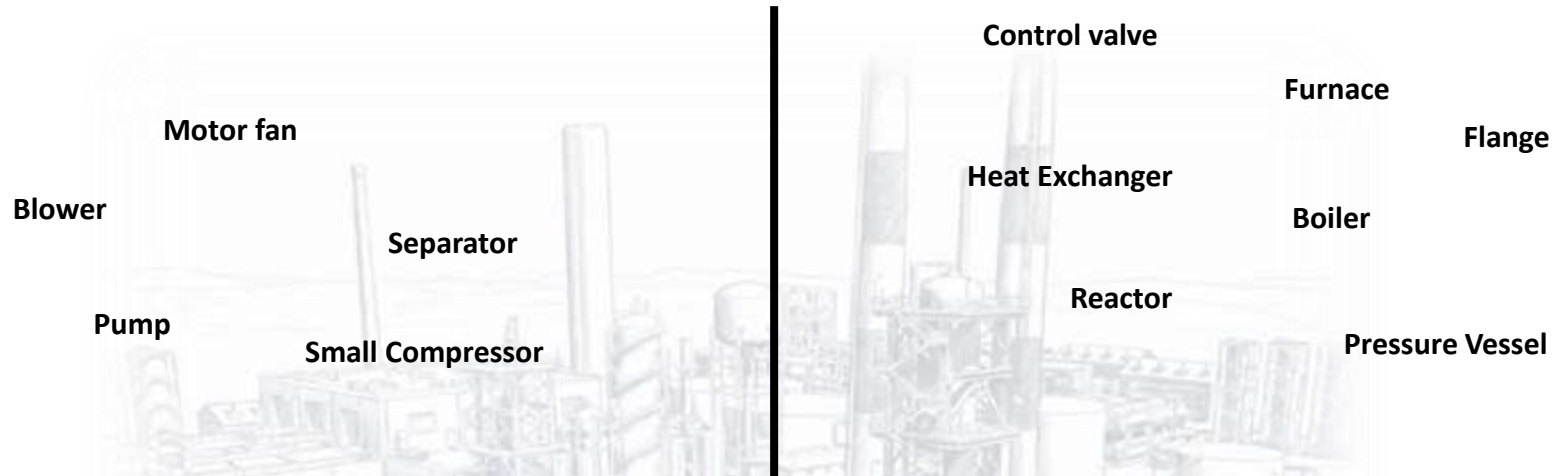
AI and ML based





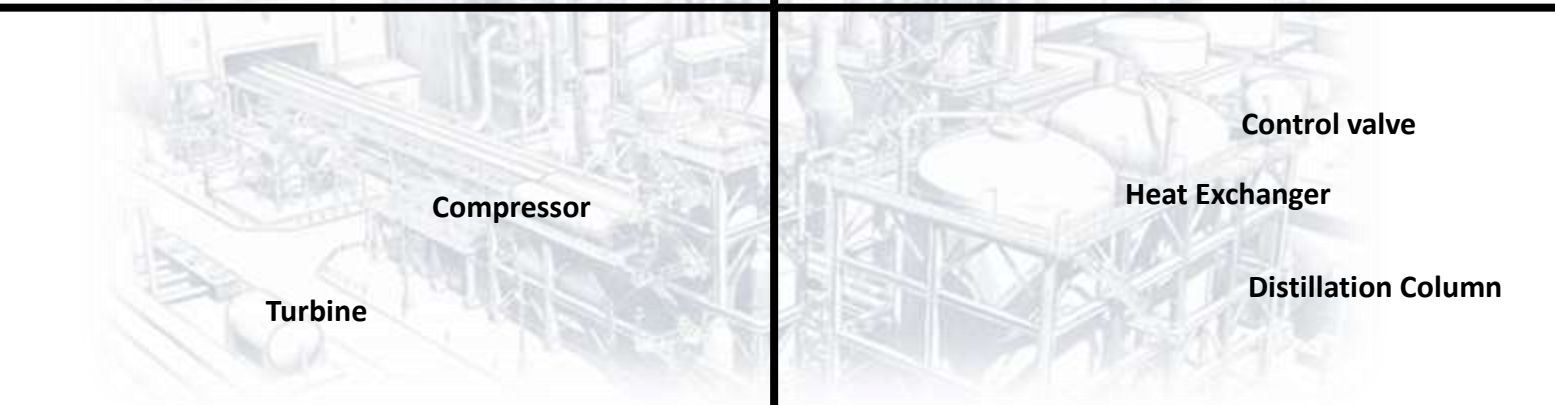
EXAMPLE OF ASSETS

Regular Equipment



Rotating

Static



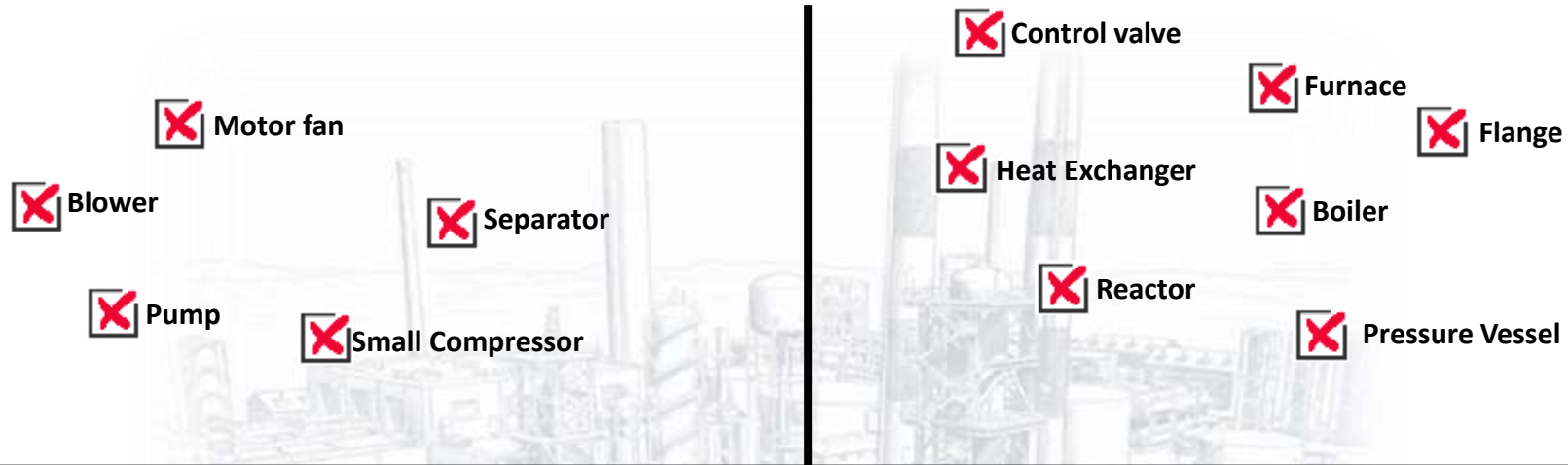
Critical Equipment





WHAT IS ALREADY BEING WATCHED

Regular Equipment



Rotating

Static



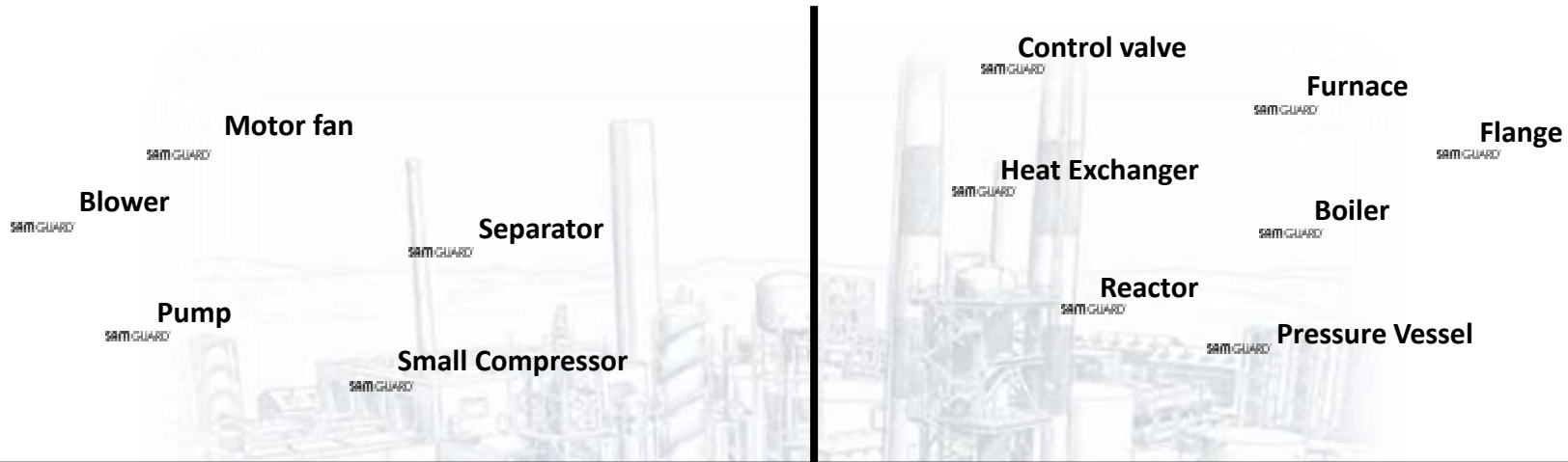
Critical Equipment





FEW EXAMPLES OF ASSETS

Regular Equipment



Rotating

Static

Critical Equipment

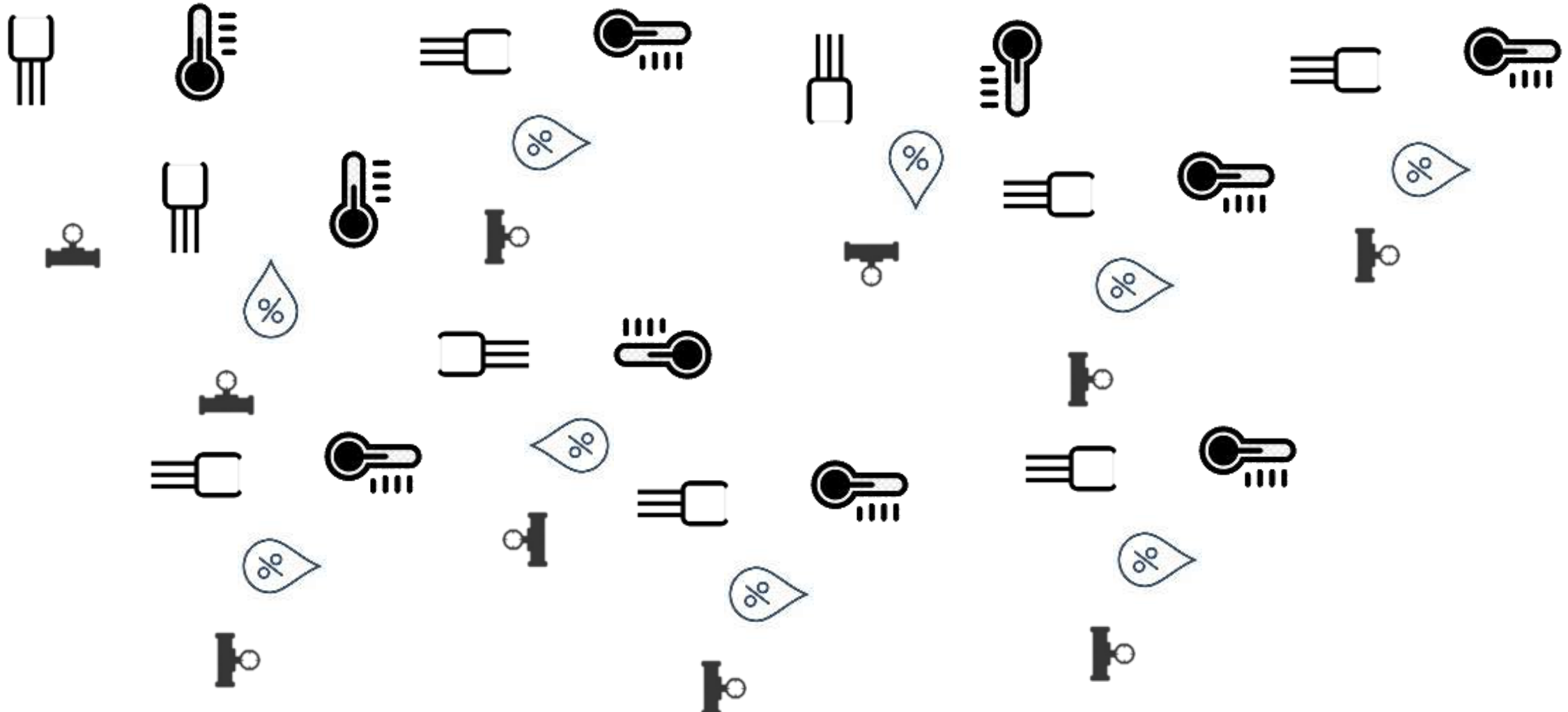


Rotating

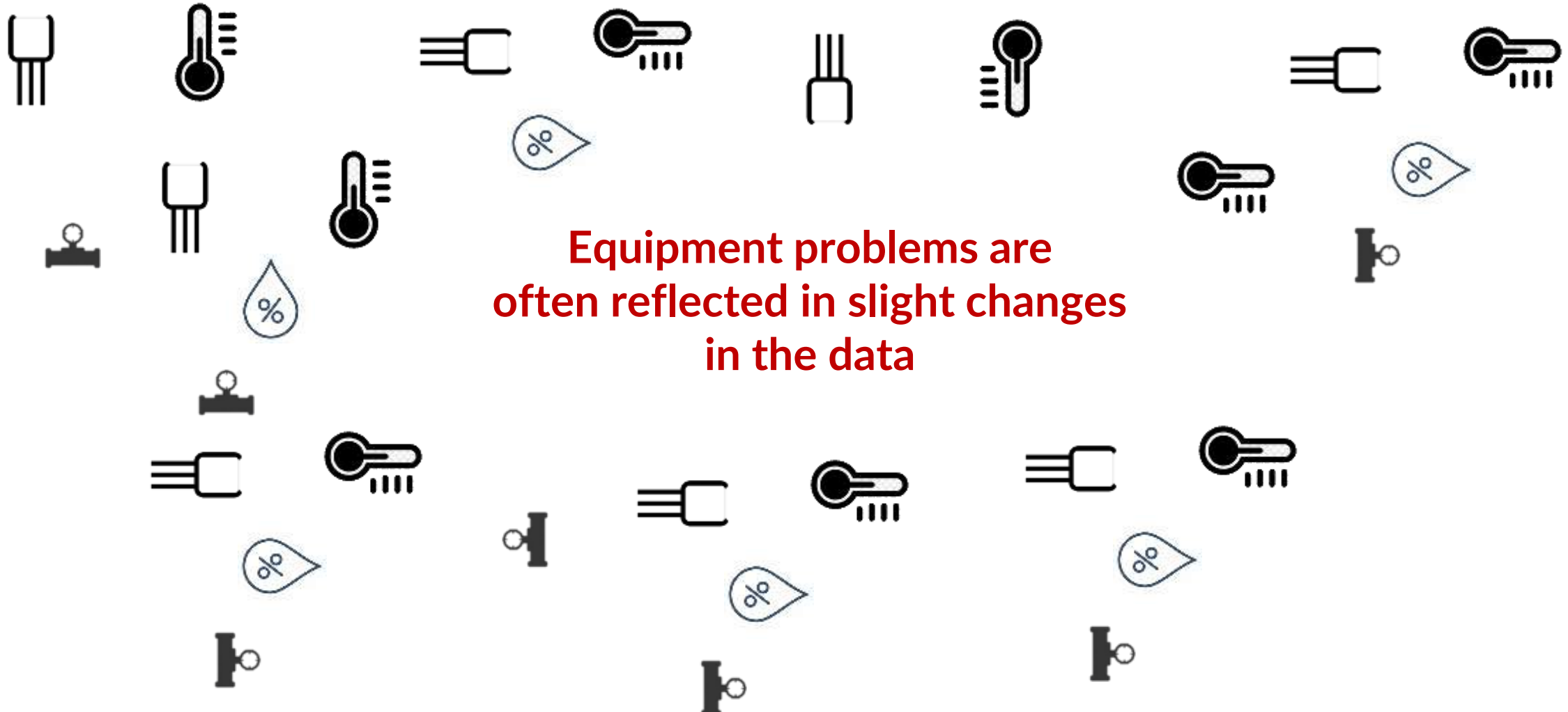
Static



SENSOR DATA IN HISTORIANS



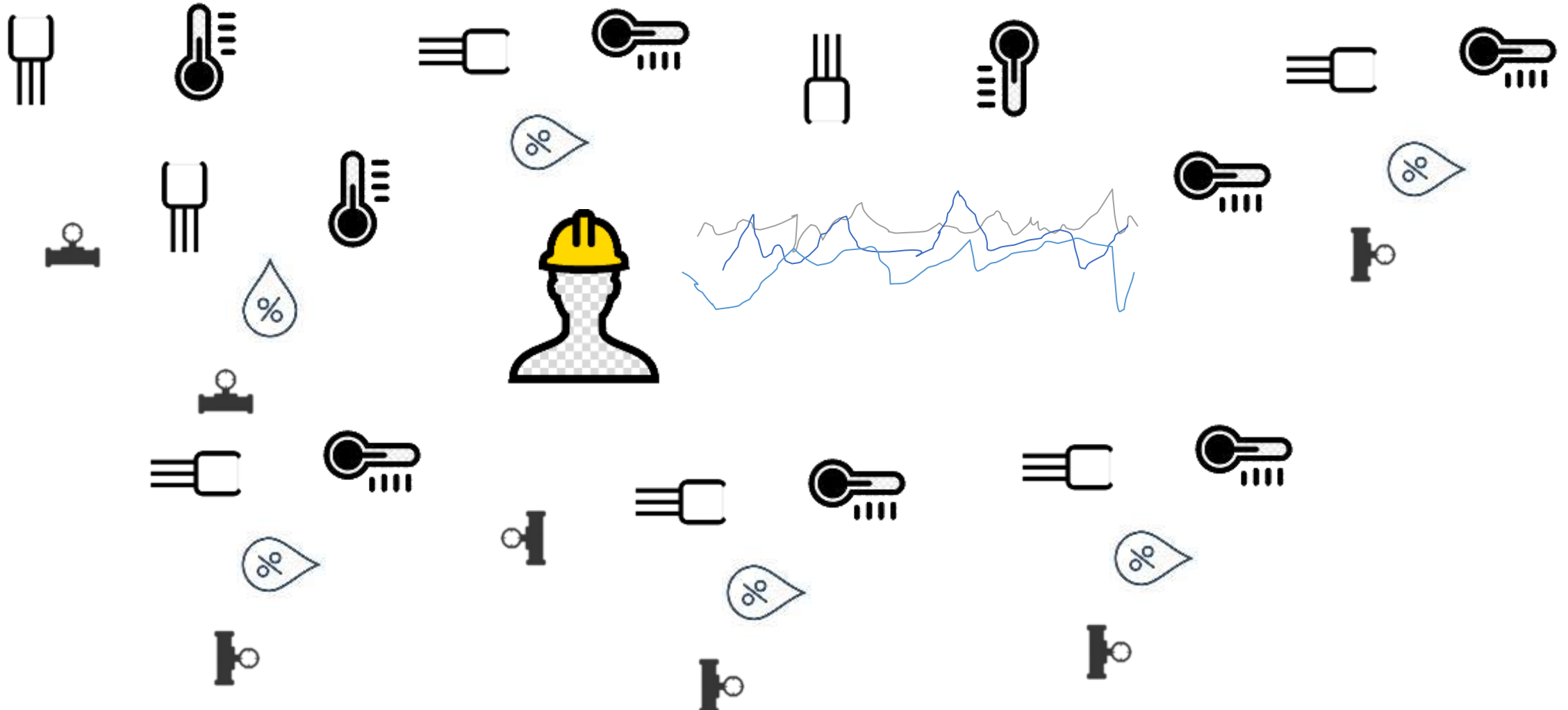
USE EXISTING DATA



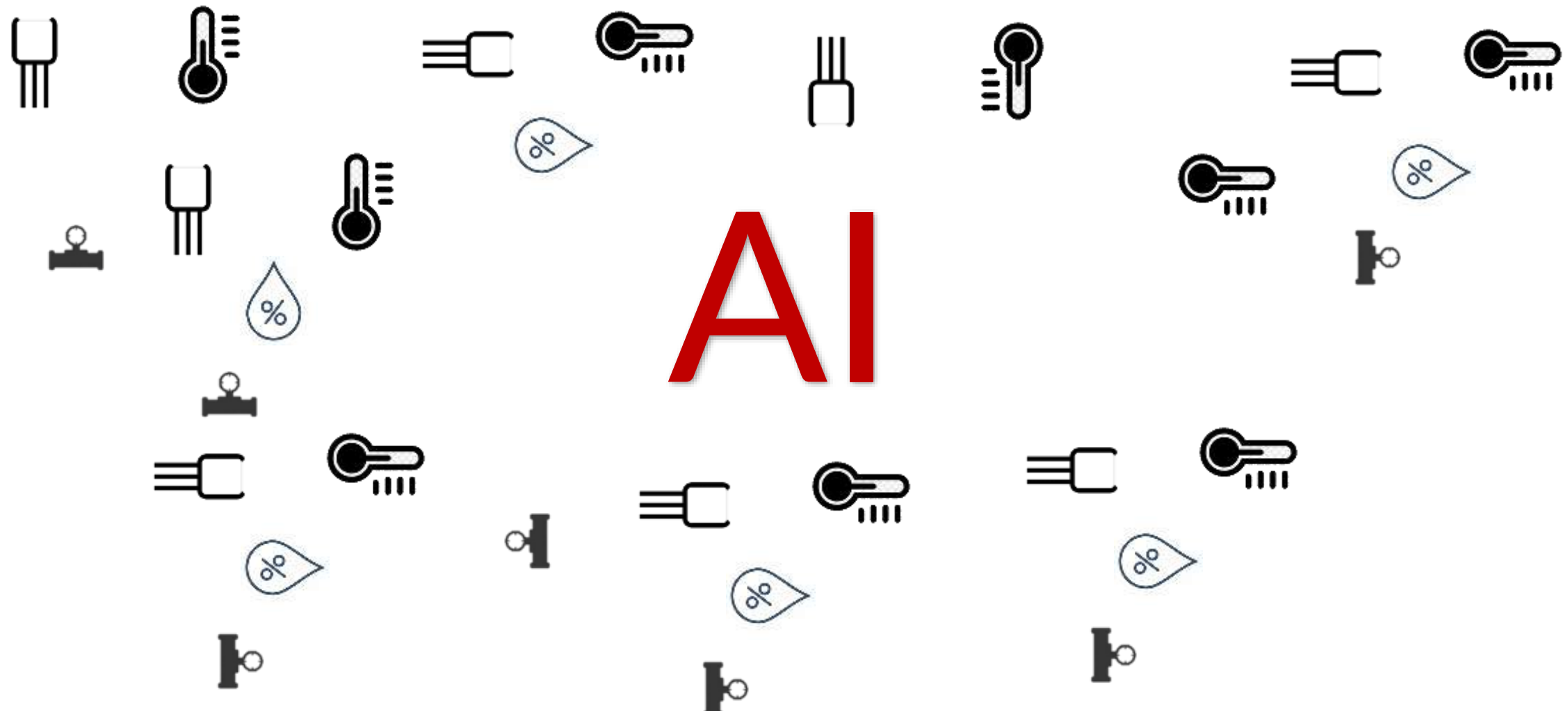
Equipment problems are often reflected in slight changes in the data



BEYOND HUMAN CAPABILITIES

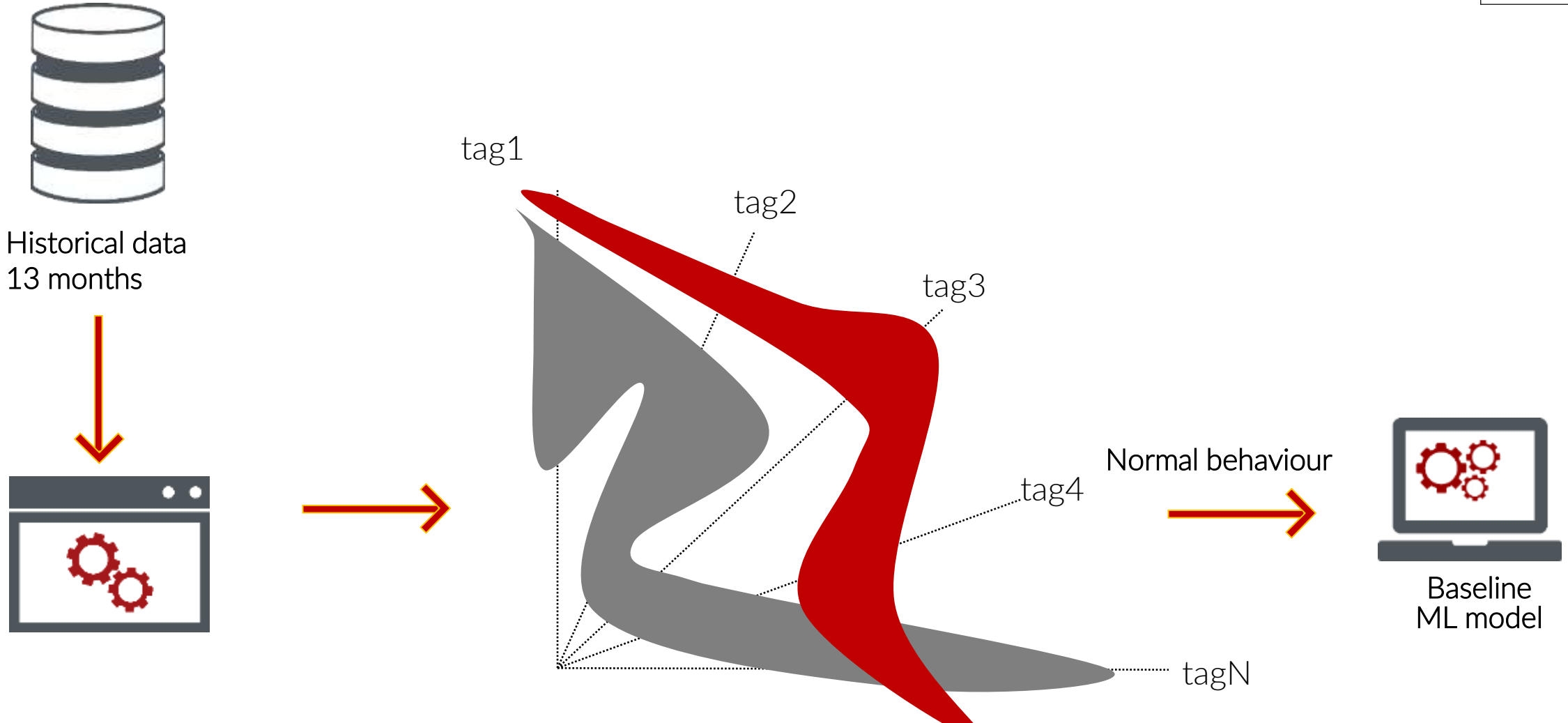


USE AI

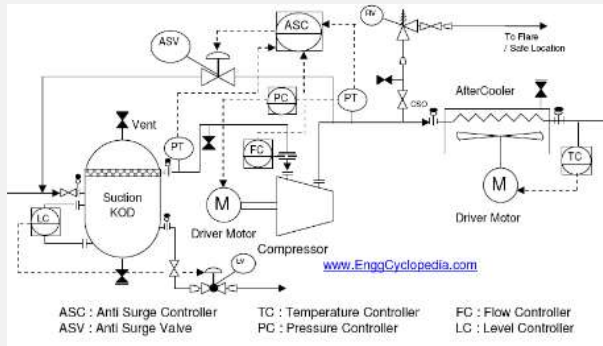




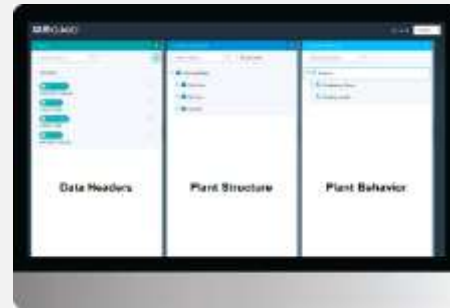
NORMAL PLANT BEHAVIOUR



REFINE DATA



Your P&ID
Your knowledge



SAM GUARD
Studio



AI Causality
Model



GOAL = NO ALERT FATIGUE!



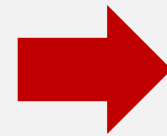
Baseline
ML model



Causality model



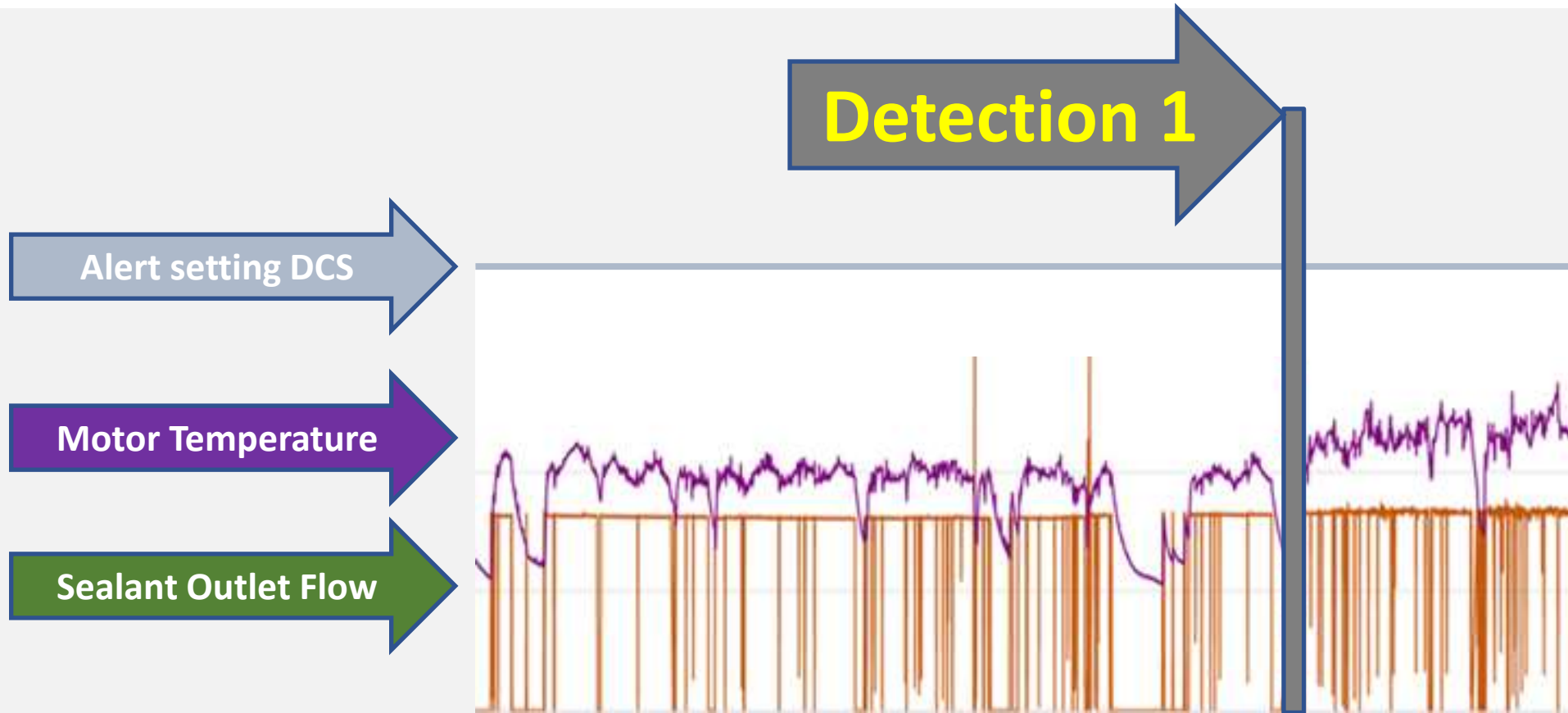
Actual plant data



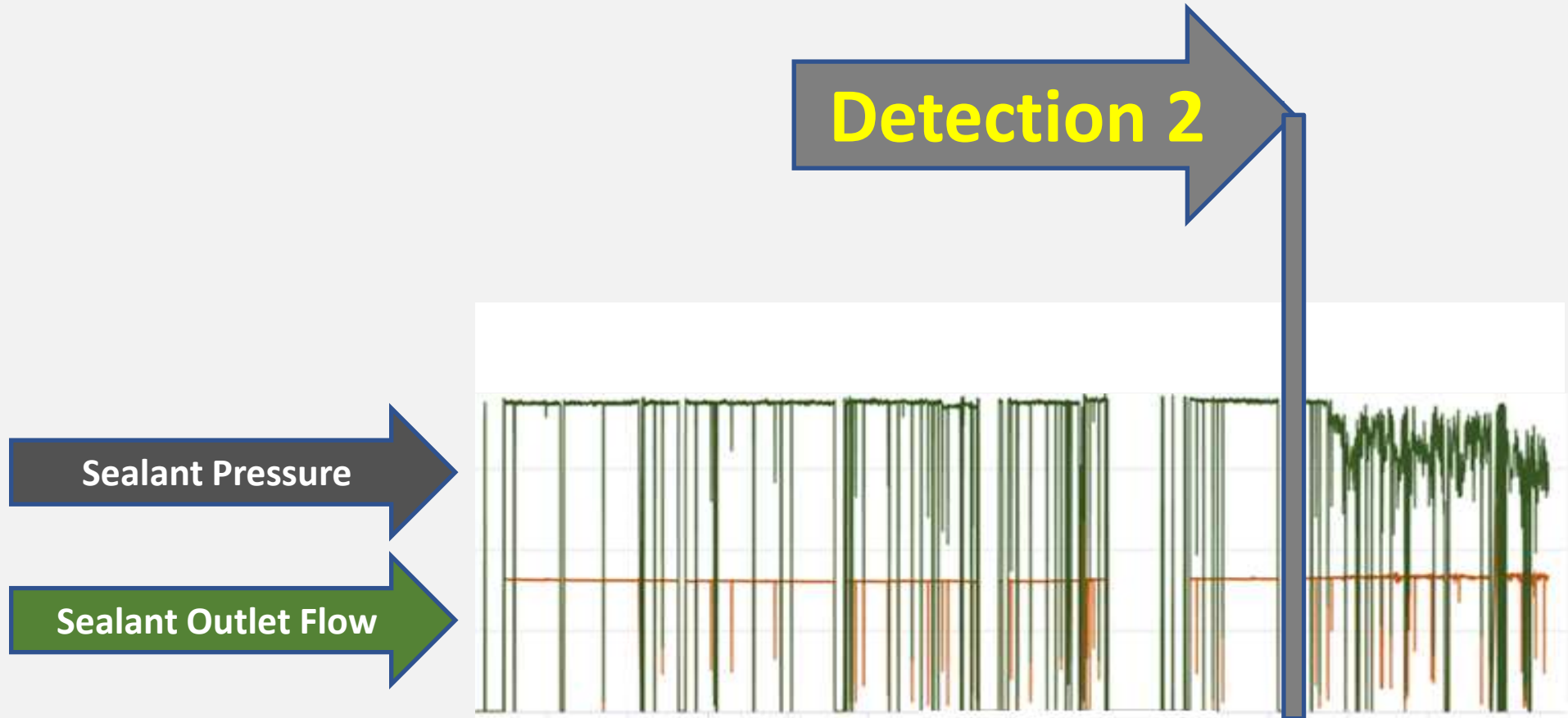
Relevant Early Alerts Only



PUMP SEALANT FLUID LEAKAGE



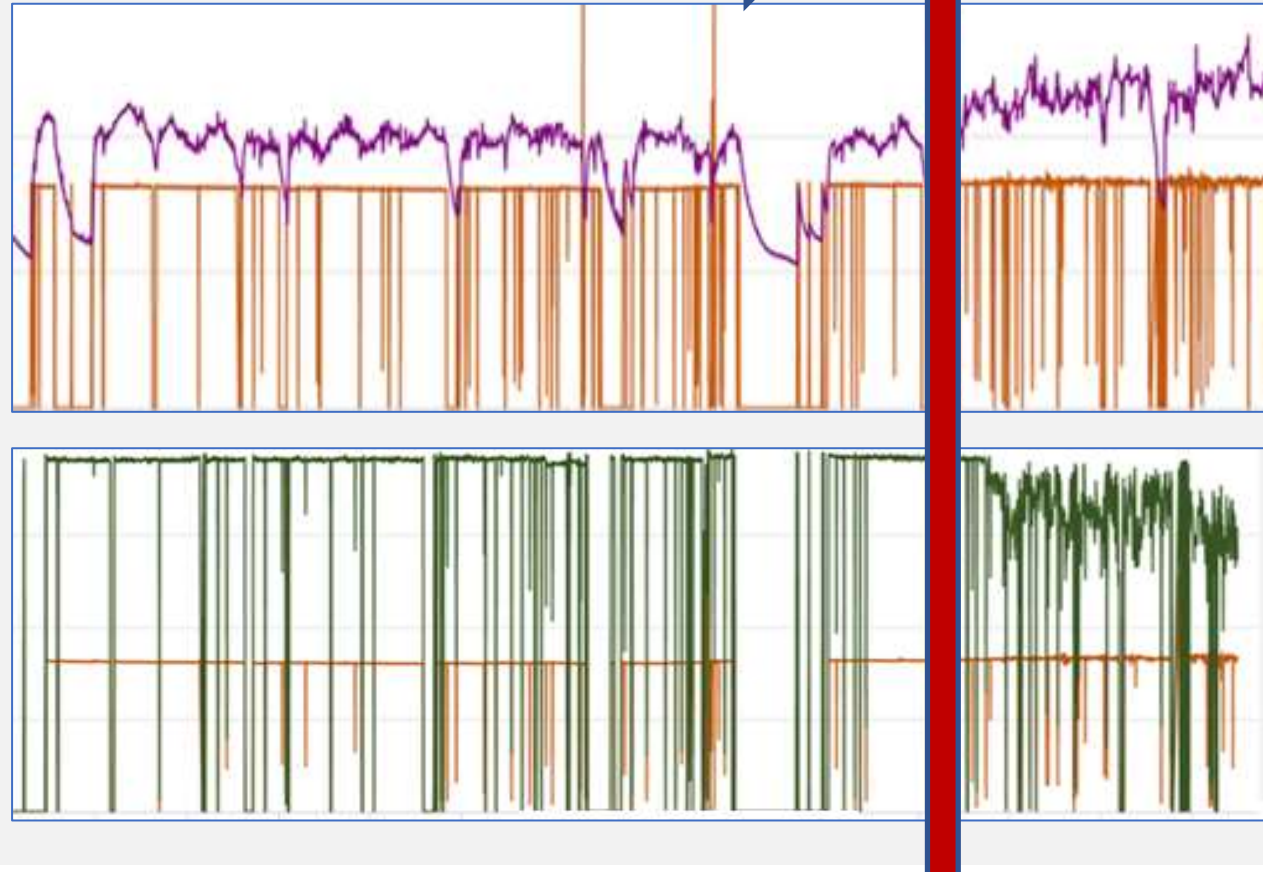
PUMP SEALANT FLUID LEAKAGE



BOTH EVENTS COMBINED



Early Alert





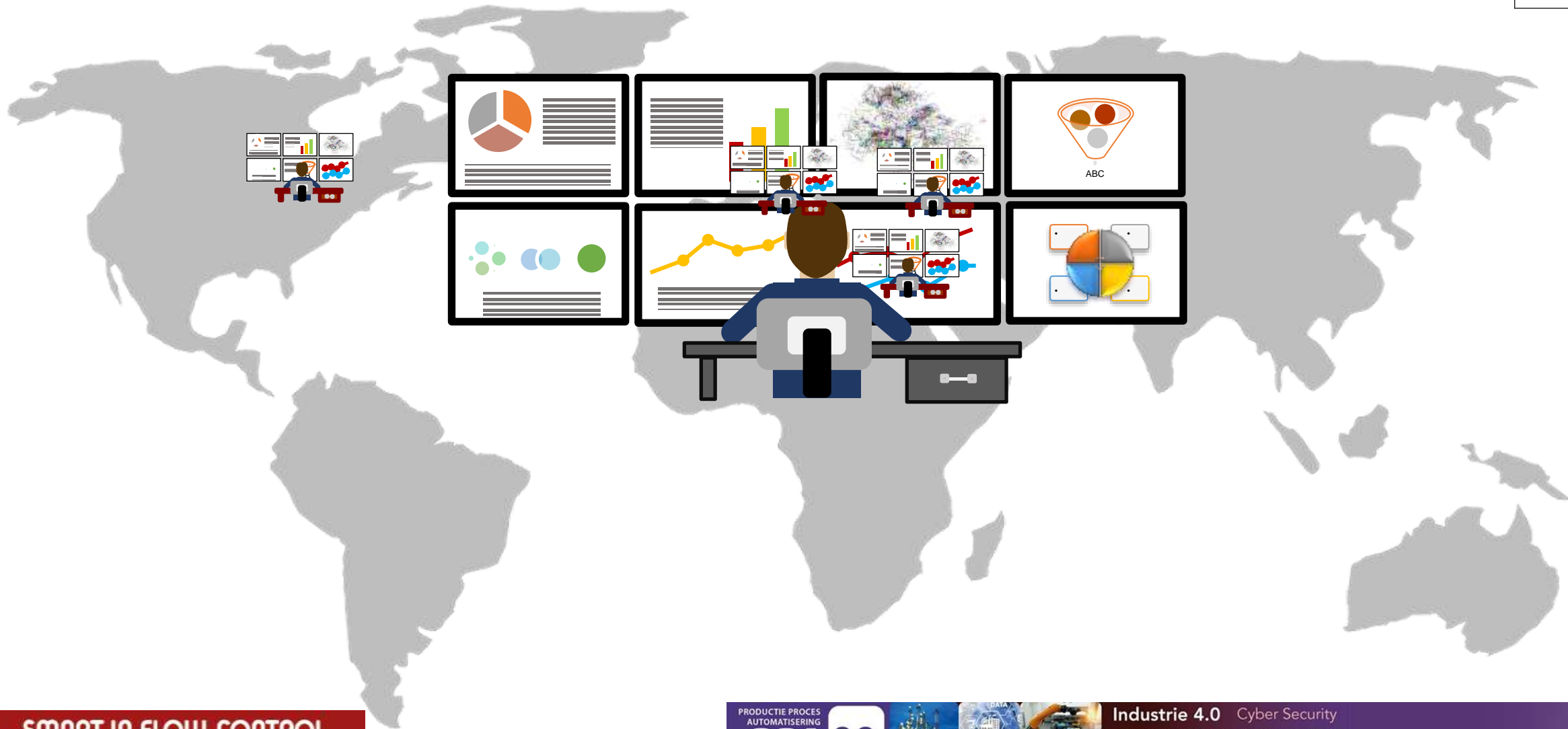
OUR EXPERIENCES

- 'Reacting' to upcoming events is a whole new perspective for operations
- Acceptance of predictive software
- Time pressure
- Business case thinking

- Focus on getting more data



ANALYTICAL MONITORING SERVICE



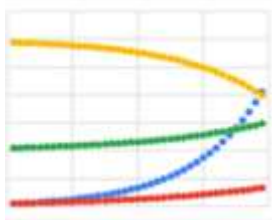
SMART IN FLOW CONTROL

PRODUCTIE PROCES
AUTOMATISERING
PPA 22

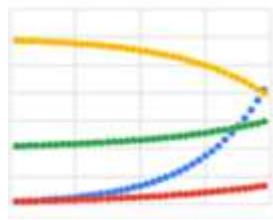


Industrie 4.0 Cyber Security
Industrial Internet of Things Data
Cloud IT/OT Integration

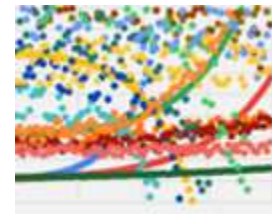
PDM AS A SERVICE OFFERS AN ALTERNATIVE



Predictive maintenance



PdM as a service



Prescriptive



Preventive actions prescribed by consultants



Preventive actions prescribed by data





SUMMARY

Know where to stop in gathering data



Historians contain relevant data

No extra data needed



Understand your goals

Clear goals as a starting point



Predictive Maintenance as a service is an alternative

Combines the best of predictive and prescriptive maintenance



No additional hardware required

Prevent extra costs





**DATA. LESS IS MORE?
DANK VOOR UW AANDACHT!**



Wilt u meer weten?



Robert Nijhuis | robert.nijhuis@samsongroup.com 06-52803573



www.linkedin.com/company/samson-regeltechniek-b.v.



www.samson-regeltechniek.nl



Info-NL@samsongroup.com



079 361 05 01



Aanmelden nieuwsbrieven:
www.samson-regeltechniek.nl | Nieuws | Nieuwsbrieven

