

Why is it a good time to start your digitalized Predictive Maintenance Approach ?



The Maintenance 4.0 "hype"

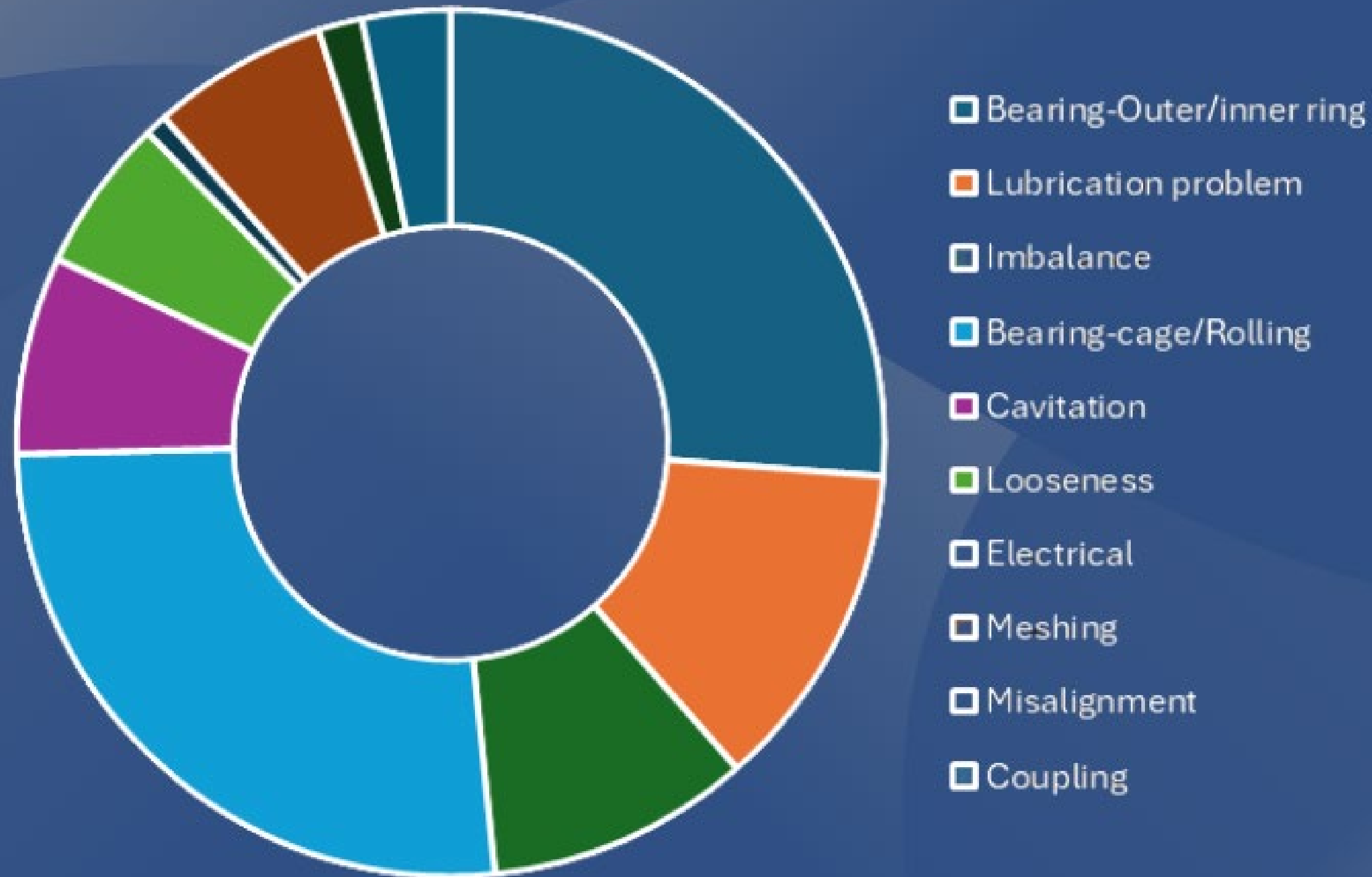


The 4.0 journey to better asset management



Why invest now in 4.0 ?

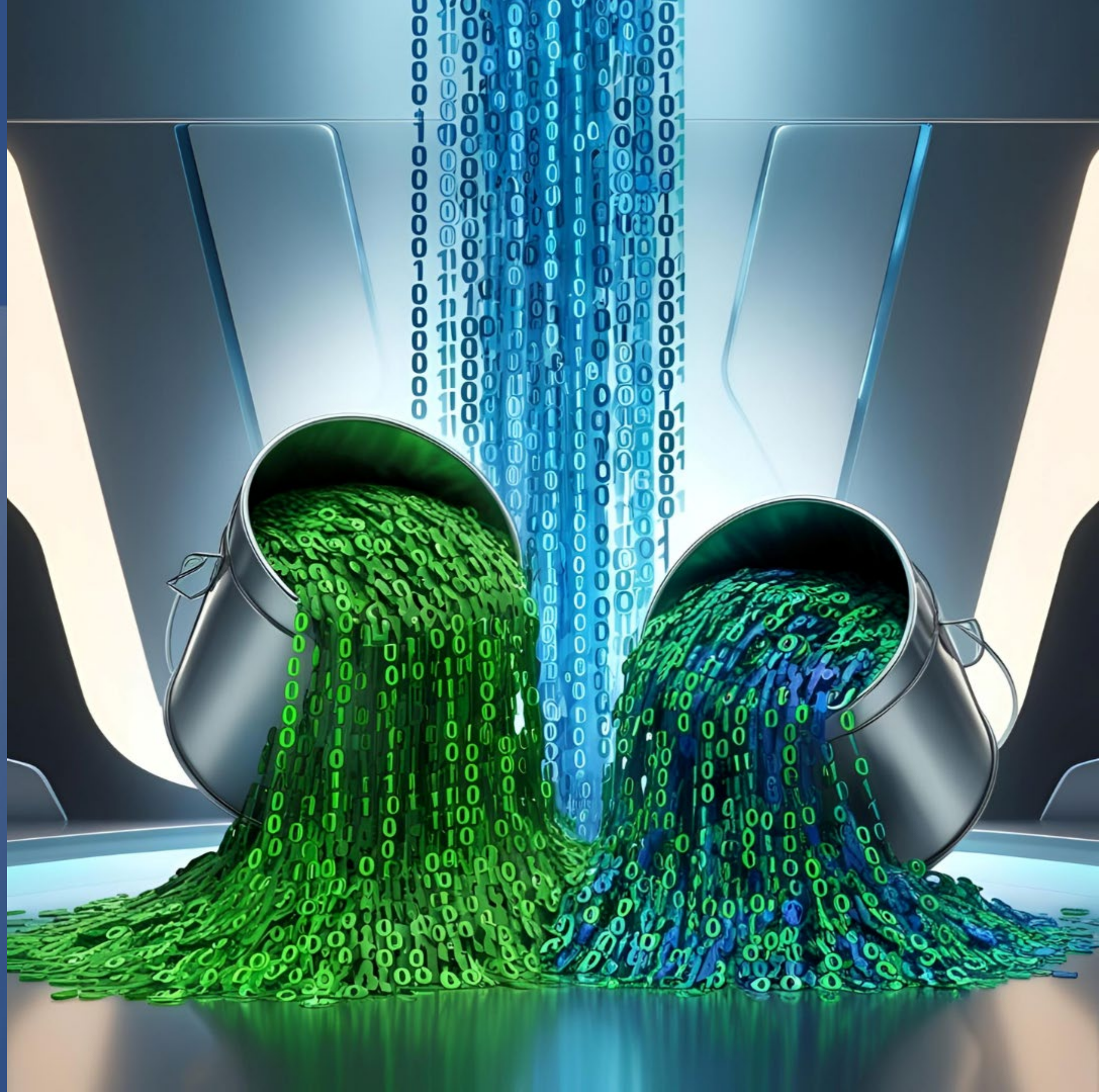
We all know about Failure Modes...



We all know about Failure Modes...

	Residual risks after incrementally implementing monitoring technologies below		
Equipment	'Classic' process monitoring	Monitoring Including vib. Analysis	Additional (& advanced) techniques
BAG	92%	92%	0%
HLPOH Chain system	97%	72%	21%
OTPYT Bag opening system	89%	72%	22%
OTYT Bag Loading ssytem	100%	42%	7%
SYSVAK Vacuum system	100%	75%	59%
Average risk	96%	70%	22%

**Multiple
buckets of
data...**



So, we need to digitize our PdM approach.



The Maintenance 4.0 "hype"

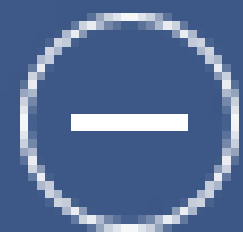


The 4.0 journey to better asset management



Why invest now in 4.0 ?

"The 4.0 Hype"



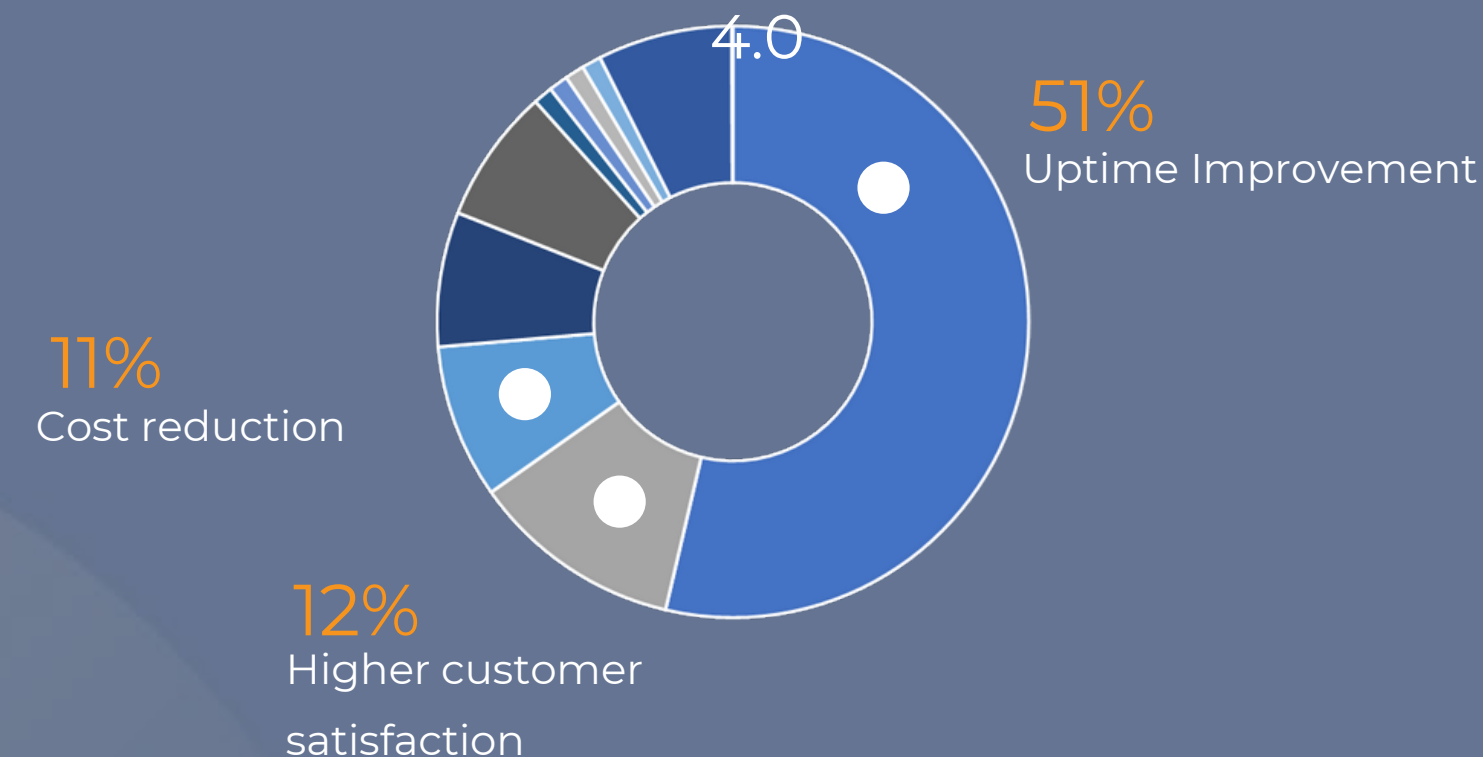
Temporary



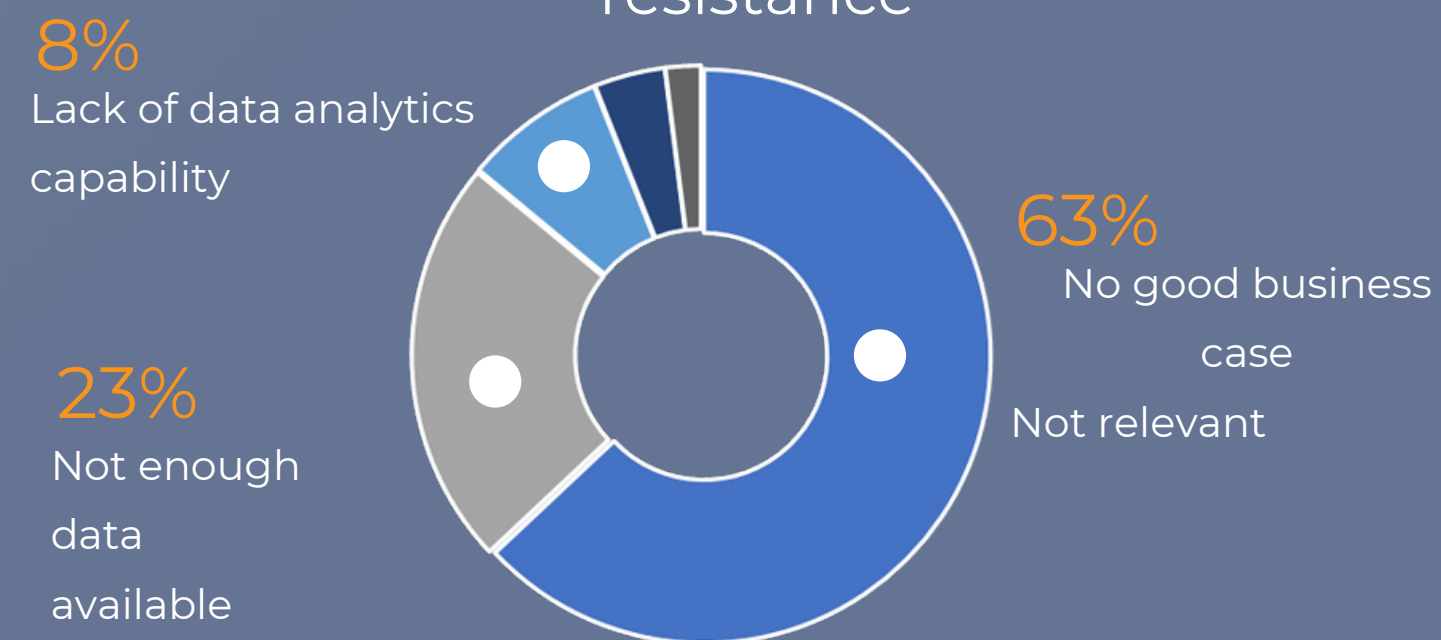
Lasting
impact



Primary goal for Predictive Maintenance



Reasons for resistance



Source : PwC - Beyond the hype

Challenge for the end user



How to overcome this challenge?

Selection criteria

- COLLECT
- CONNECT
- MANAGE
- ANALYZE

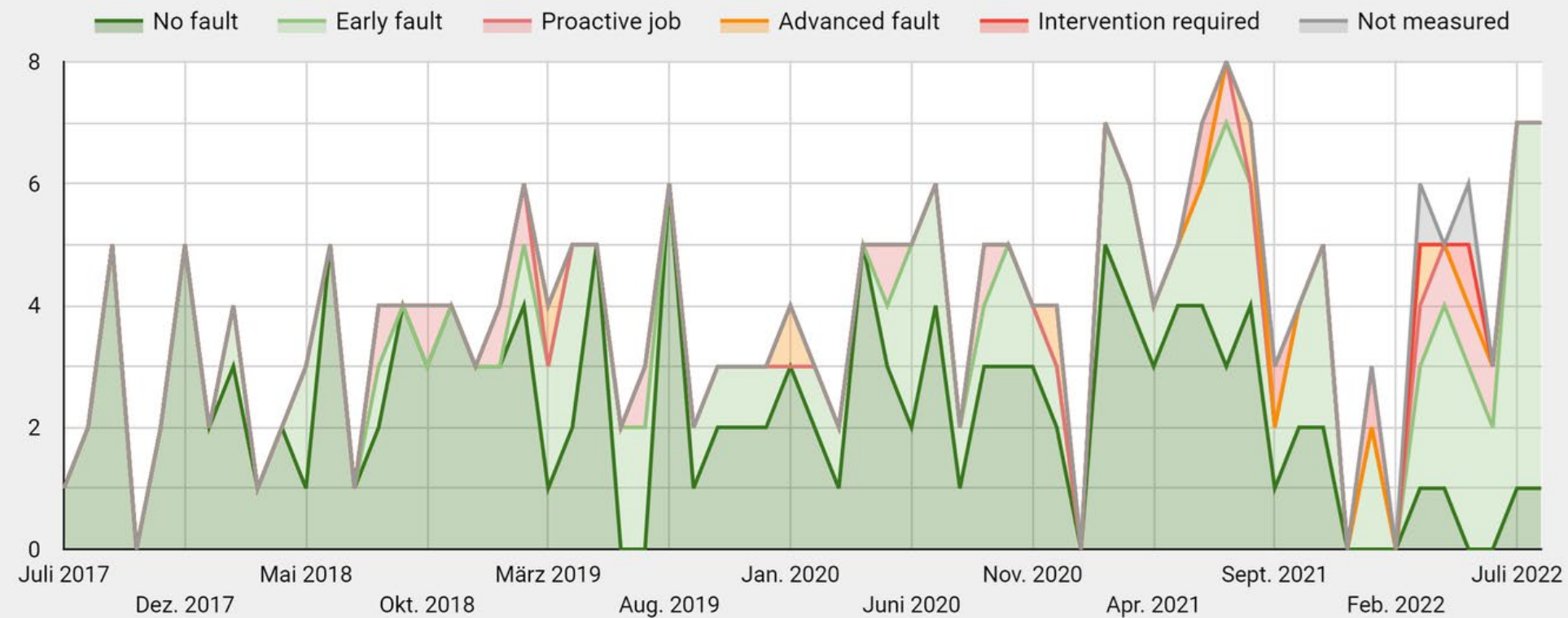




ANALYZE

Transform
information into
relevant insights

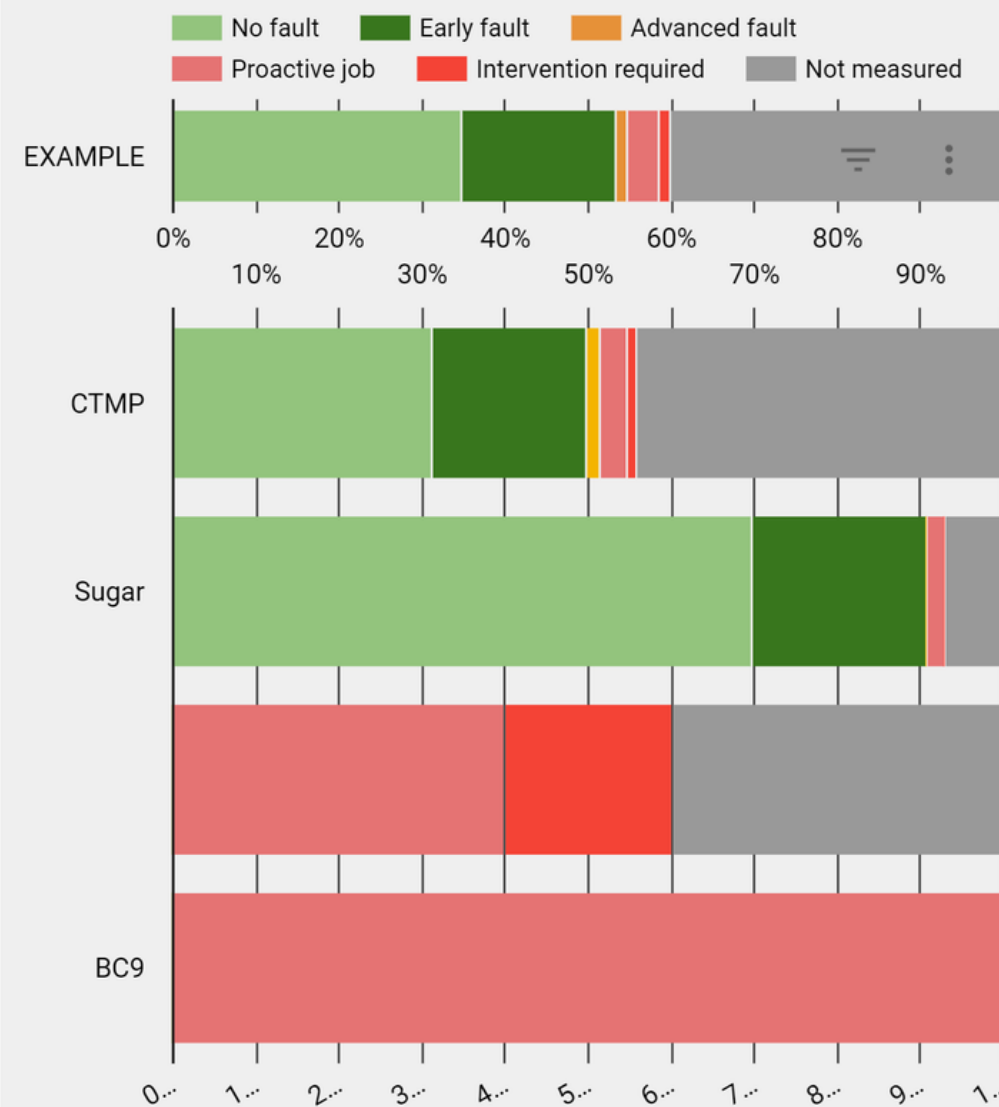
Assets status distribution over time



ANALYZE

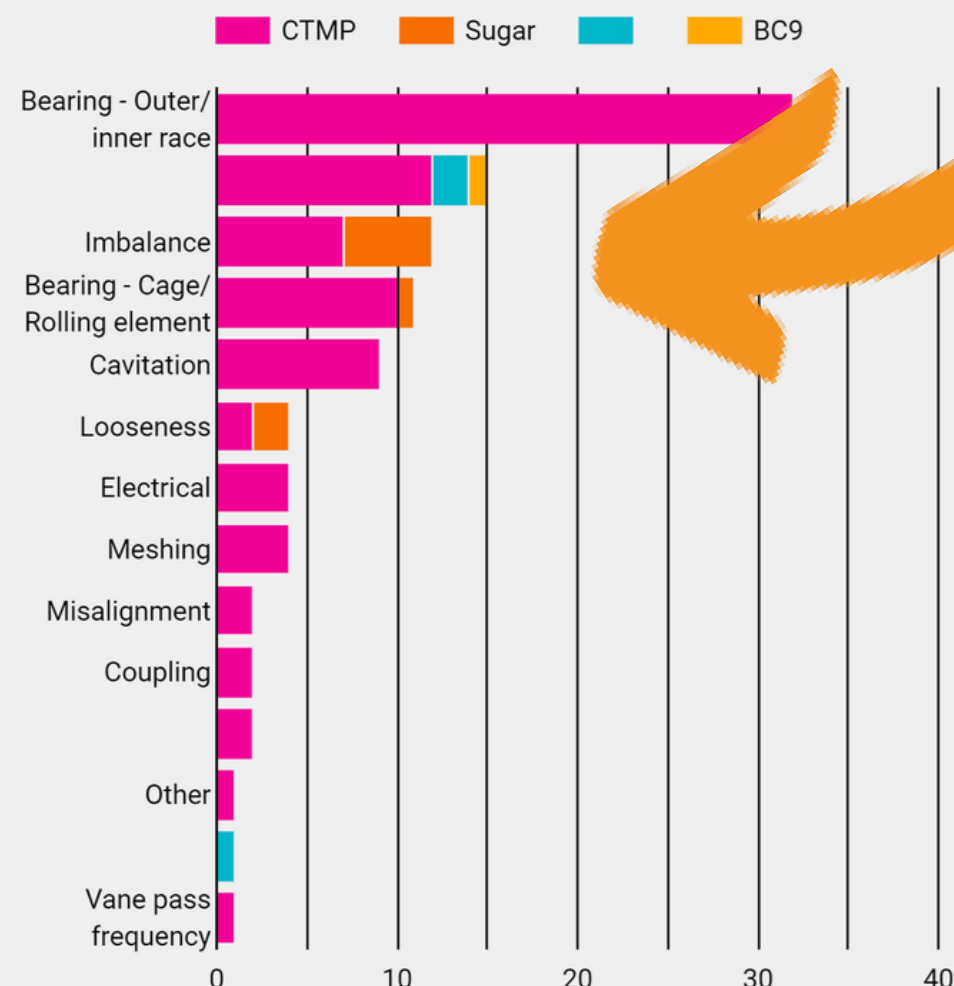
Transform
information into
relevant insights

Assets status distribution site / BU



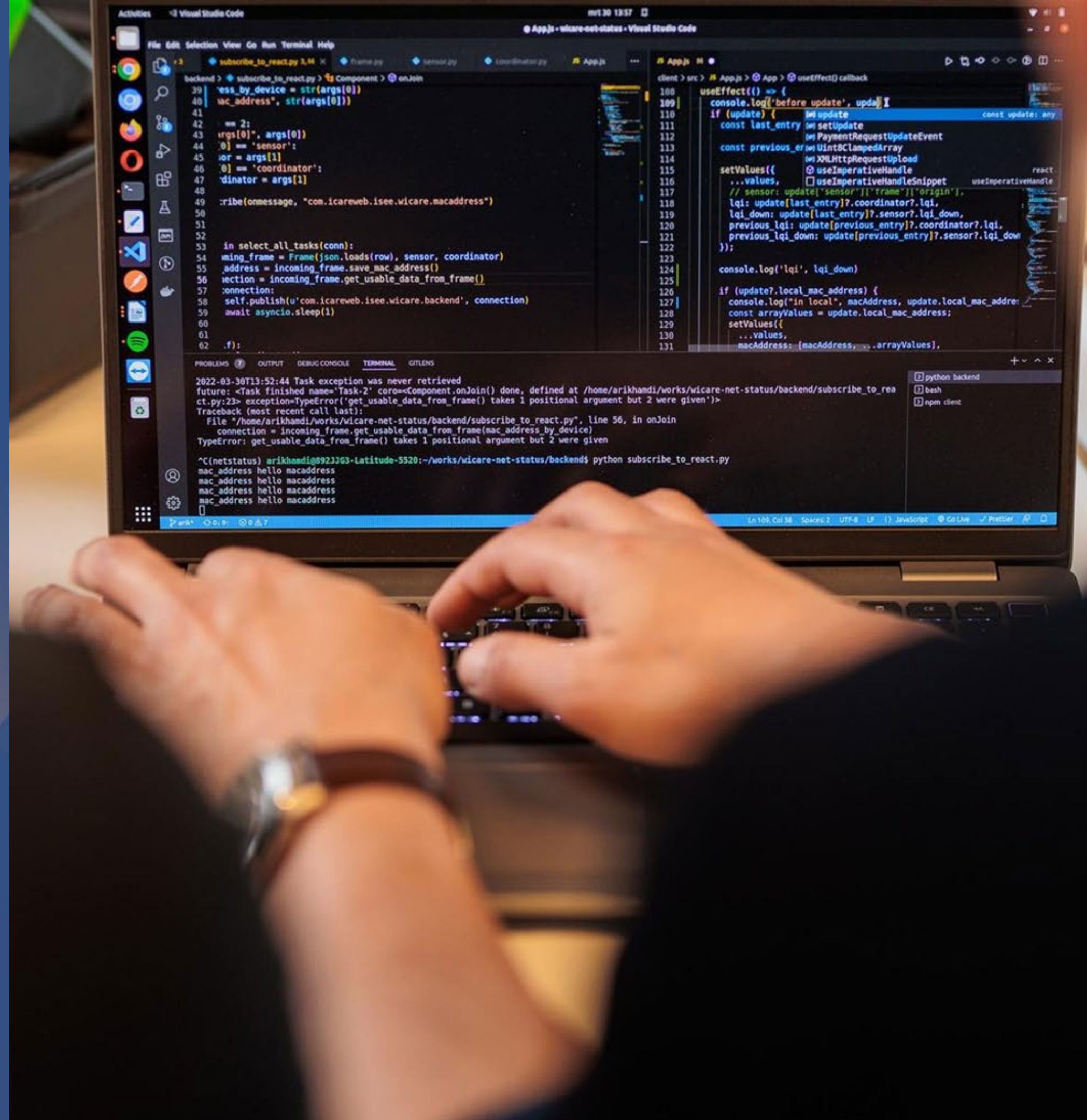
Failures repartition by BU

(Top 10 by BU)



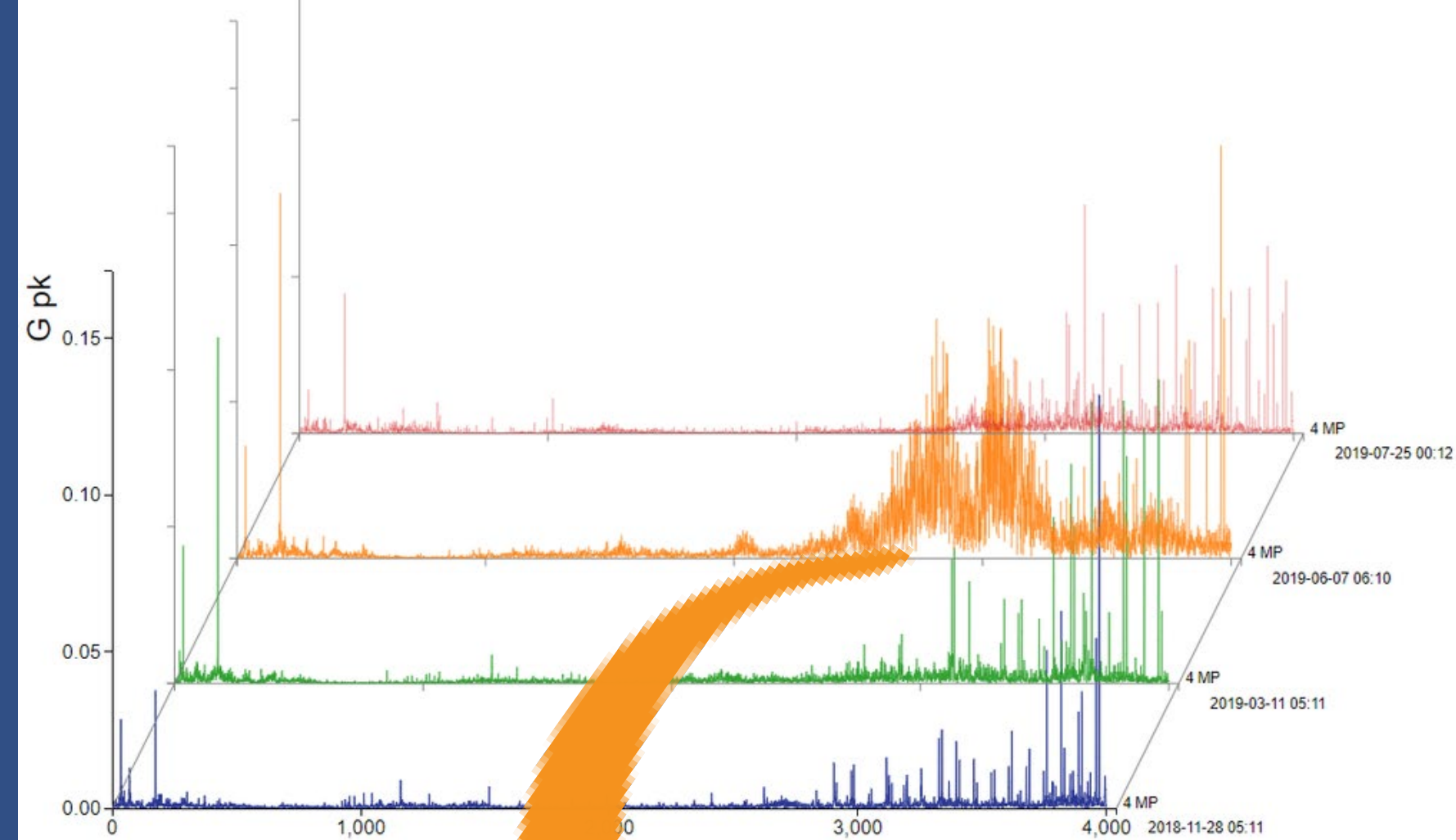
MANAGE

Transforming data
into information

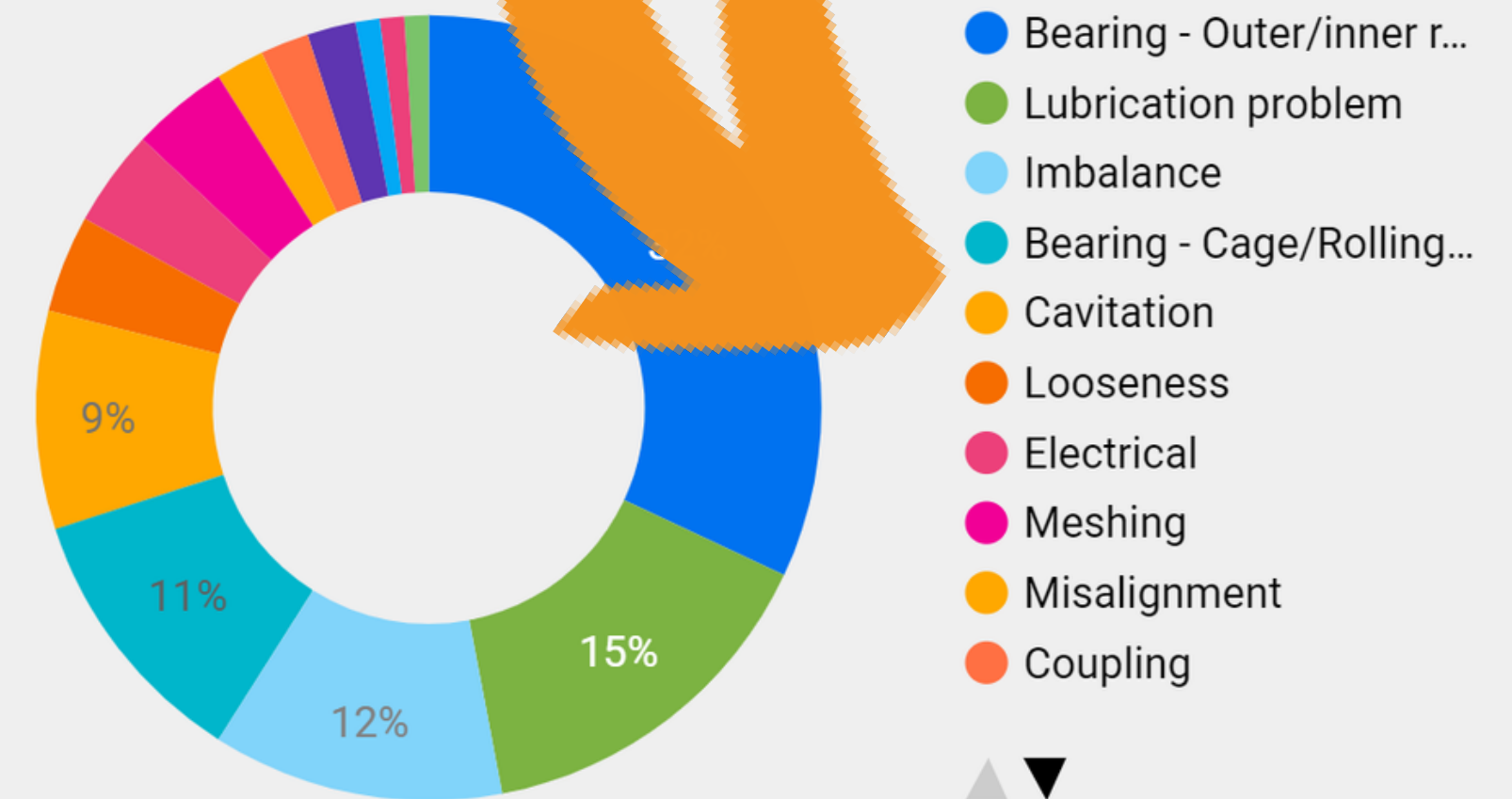


MANAGE

Transforming data
into information



Faults distribution

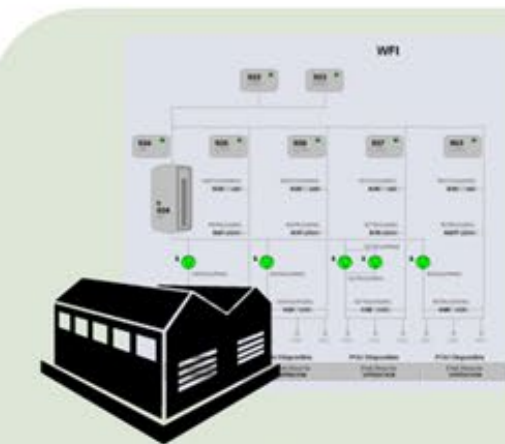
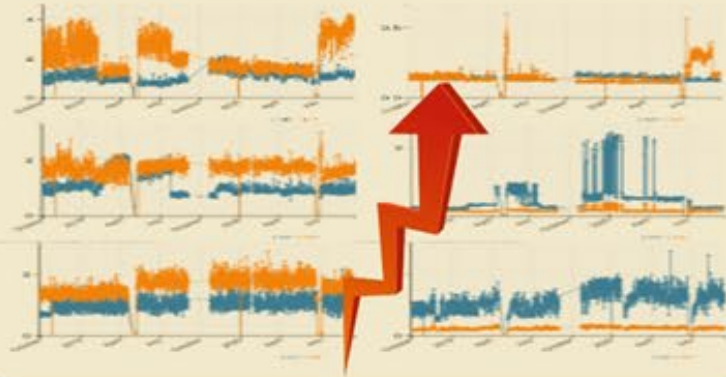


CONNECT

Data is stored in
one location and
connecting with
other data sources

CONNECT

Vibrations logged data



Historic
process data

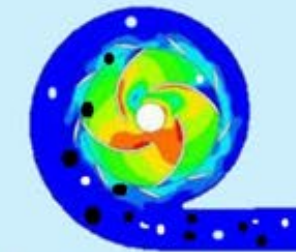


Cavitation risk detection & warning



Best Efficiency Point
(BEP) status

Reduction-prevention of production losses



due to impeller wear



due to unplanned downtime

COLLECT

Collecting
quality data



How to make it last?

Selection criteria

COLLECT

CONNECT

MANAGE

ANALYZE



CONNECT



Store & connect data



Open platforms become the standard

MANAGE

 Transforming data into information

Maintenance

approach

Reliability engineer



Data

approach

Data scientist



Predictive Maintenance

4.0





ANALYZE

PdM Monitoring Metrics

Date selection : Sélectionner la période

Corporate data

Survey
214

Assets analysed
183

Technology used

Vibration

100,00 %

Lube

0,00 %

Infrared

0,00 %

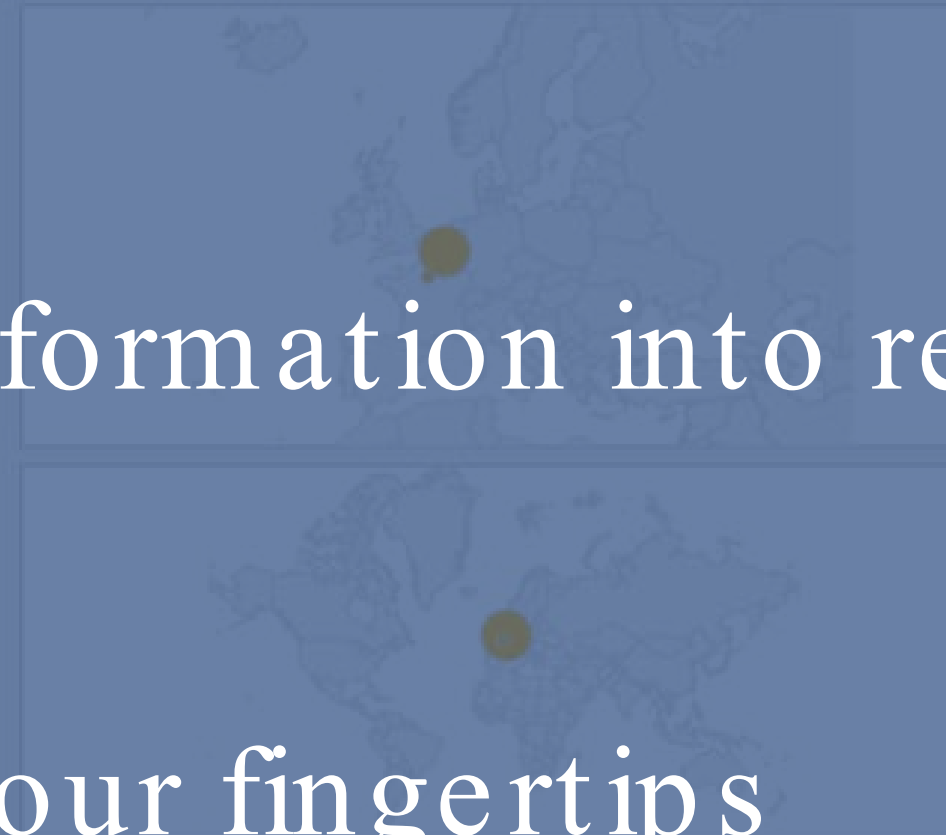
Survey Schedule Compliance (relative to measurement frequency)



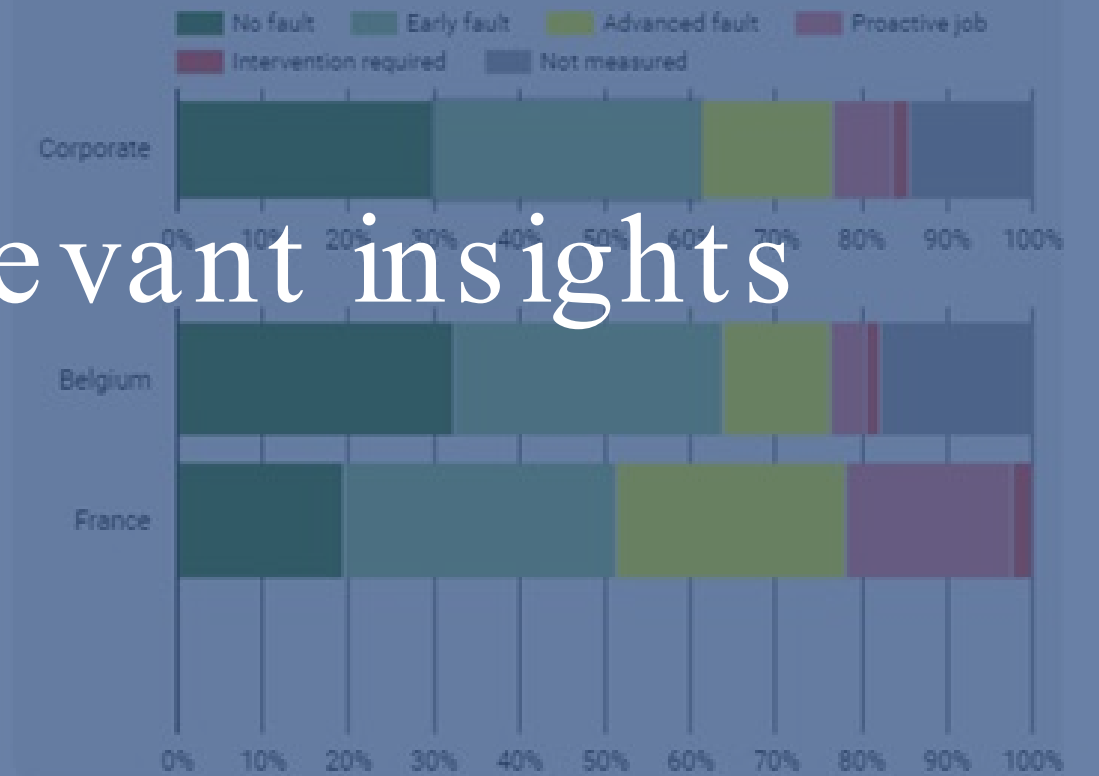
Analysis Lead Time

0,31 days

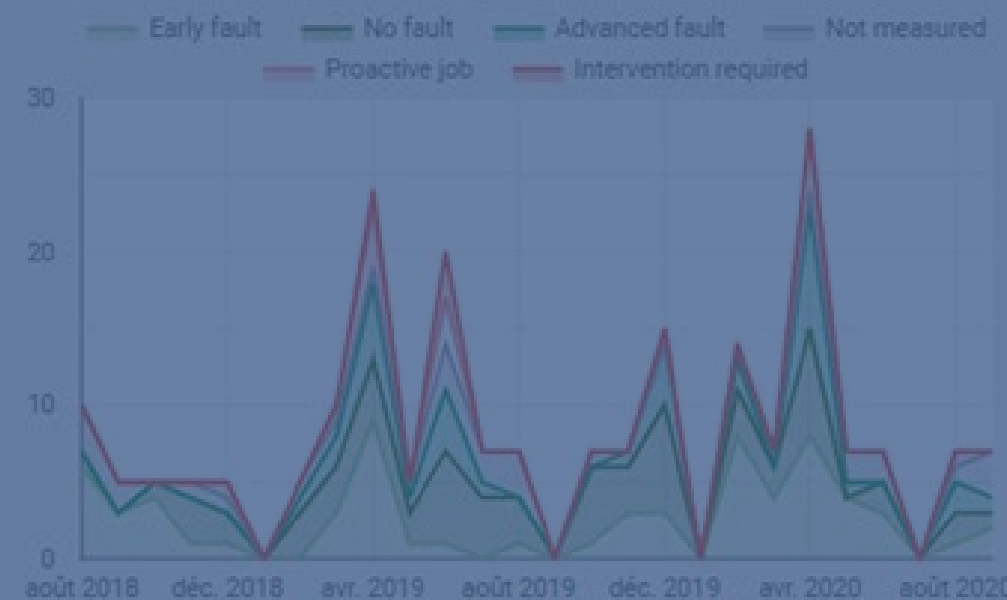
Assets analysed per country



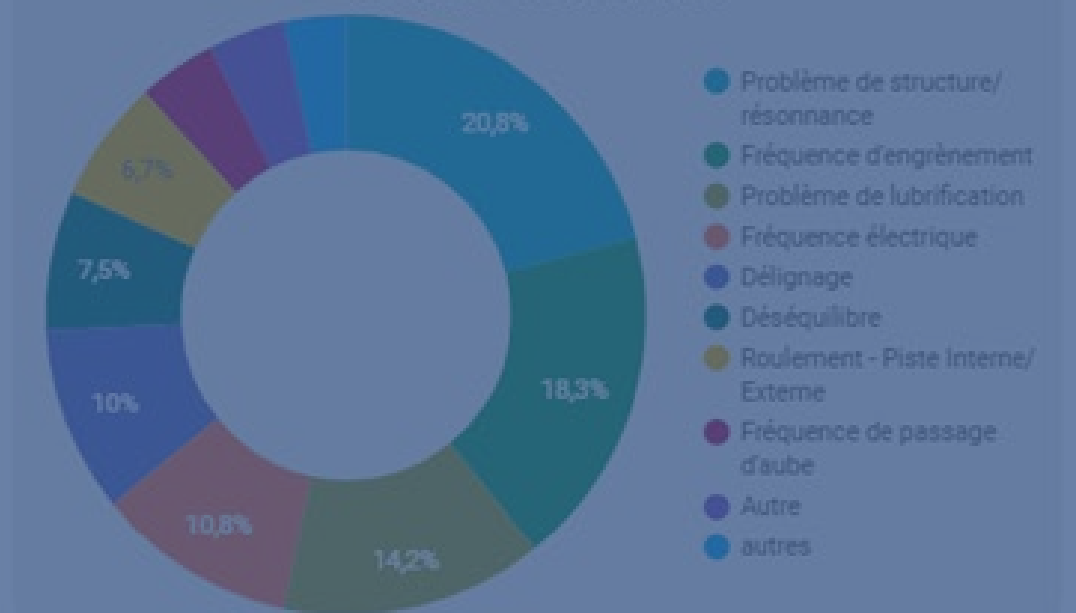
Assets status distribution by country



Assets status distribution over time



Failures distribution



Transform information into relevant insights

Insights at your fingertips

COLLECT

Collecting
quality data





**Massive
deployment -
Volume
drives down
cost**

COLLECT

➤ Lasting impact on
cost of digital PdM

➤ He SaaS





Why now?

Maintenance becomes a topic in the boardroom



Insight at their fingertips



Information at our fingertips



Thanks!

Pieter Van Camp

CCO

pieter.vancamp@icareweb.com

