
SBM Offshore Data Governance Journey

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AVEVA

SBM Offshore

Objectives

Architecture

Challenges and Governance

Applications

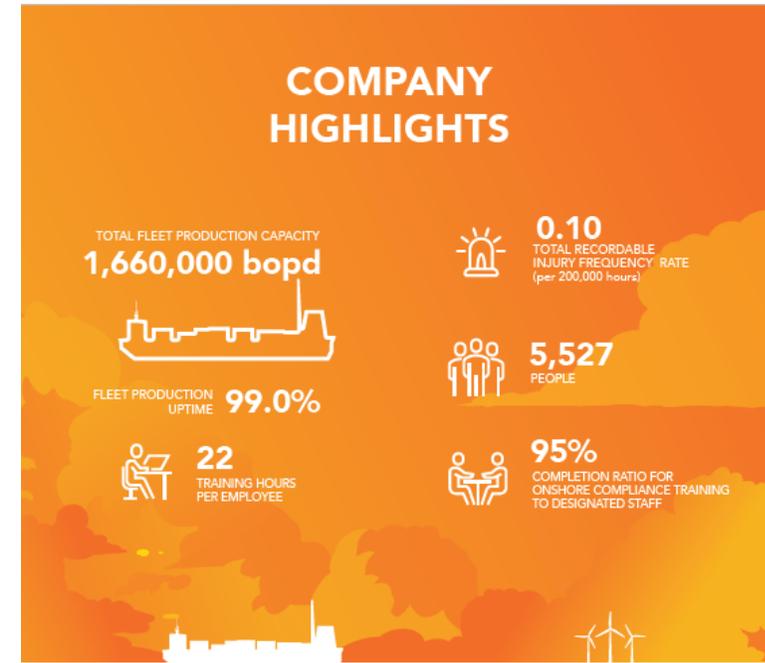
Avevanet integration

SBM OFFSHORE

OUR VALUES



OUR VISION



UNDERLYING DIRECTIONAL EBITDA
US\$944 million

DIRECTIONAL TOTAL ASSETS
US\$7.9 billion

MARKET CAPITALIZATION
US\$3.6 billion

UNDERLYING IFRS NET PROFIT ATTRIBUTABLE TO SHAREHOLDERS
US\$277 million

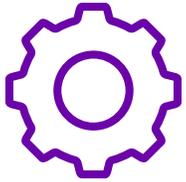
UNDERLYING DIRECTIONAL NET PROFIT
US\$125 million

ENTERPRISE VALUE
US\$9.7 billion

IFRS TOTAL ASSETS
US\$11.1 billion

UNDERLYING IFRS EBITDA
US\$966 million

Leveraging the PI System for Operational Data Governance



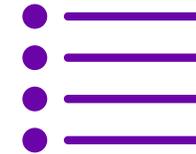
Challenge

- Structure the data in order to increase further efficiency



Solution

- Deployed the latest technology available on the market including PI AF and PI Vision as a foundation for Process Monitoring, Condition Based Maintenance, Advanced Analytics, and data governance

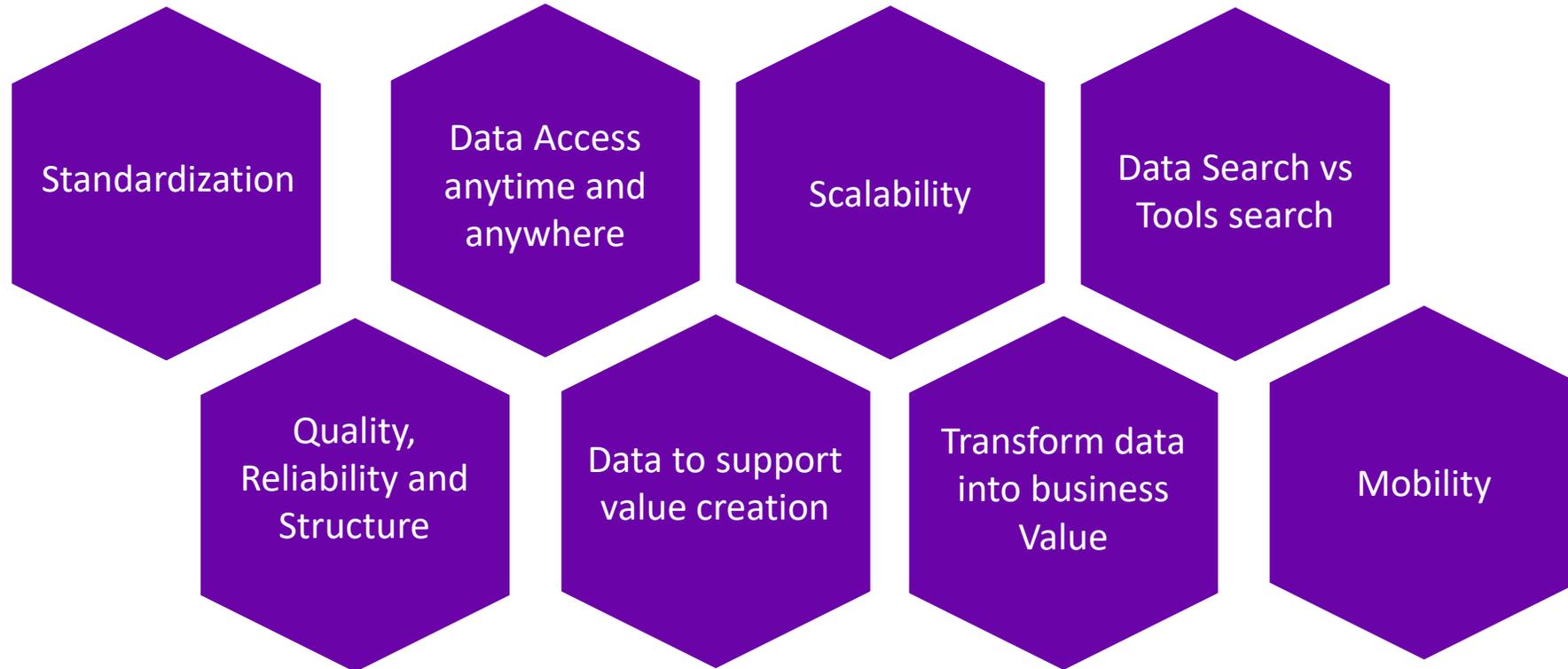


Benefits

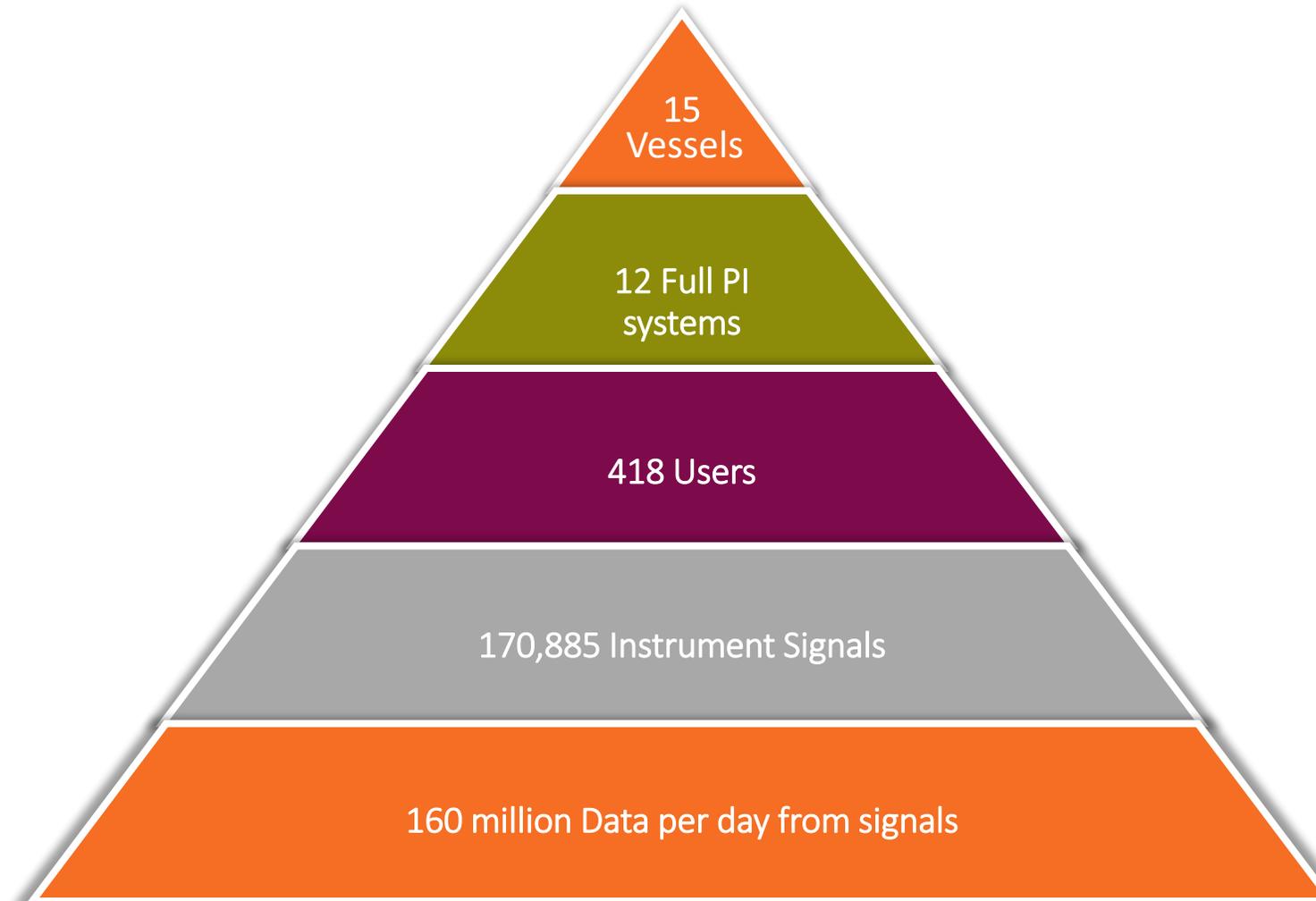
- Improve and standardize monitoring
- Reduce cost and increase uptime
- Optimize production
- Unleash use of machine learning and artificial intelligence based on operational data.



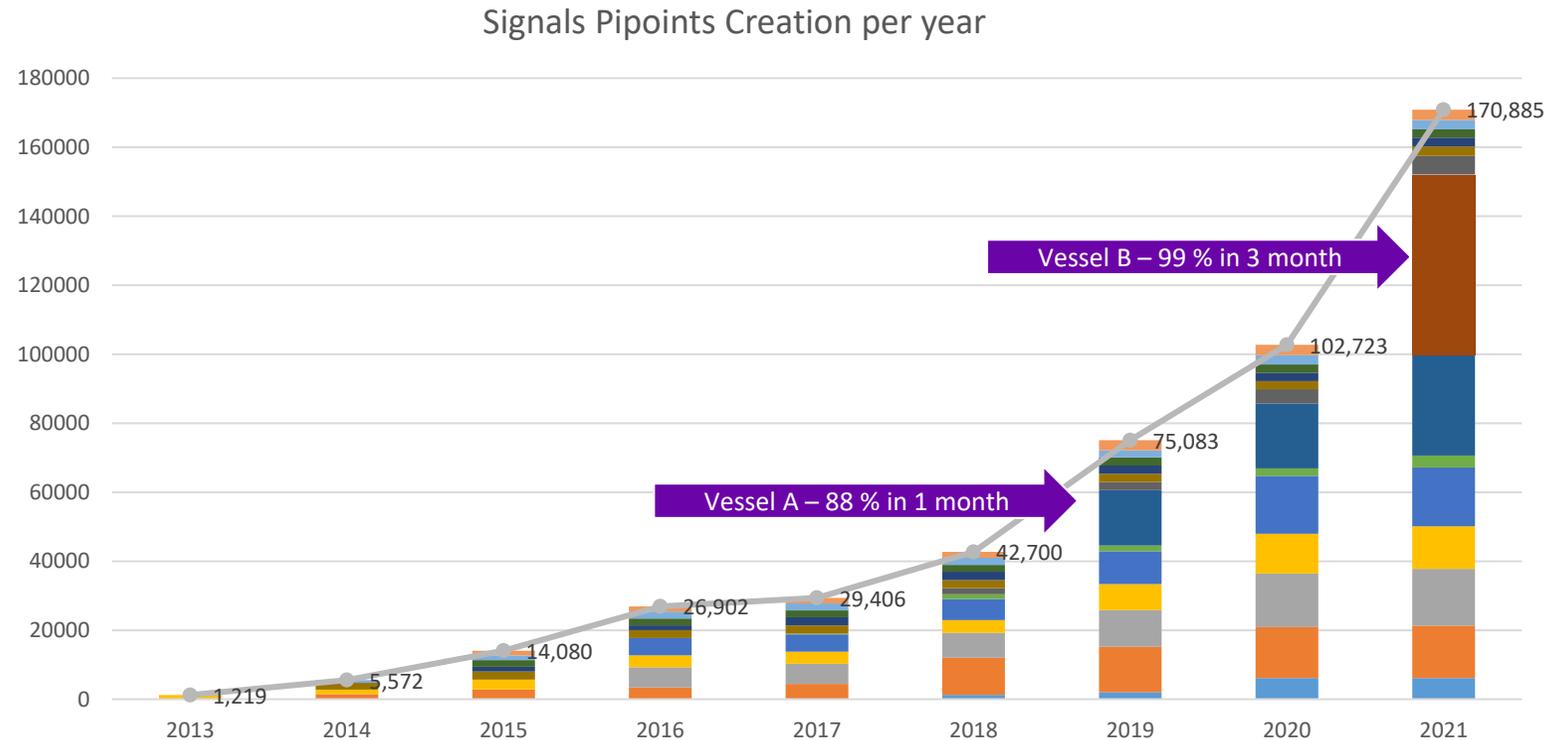
Core Objectives



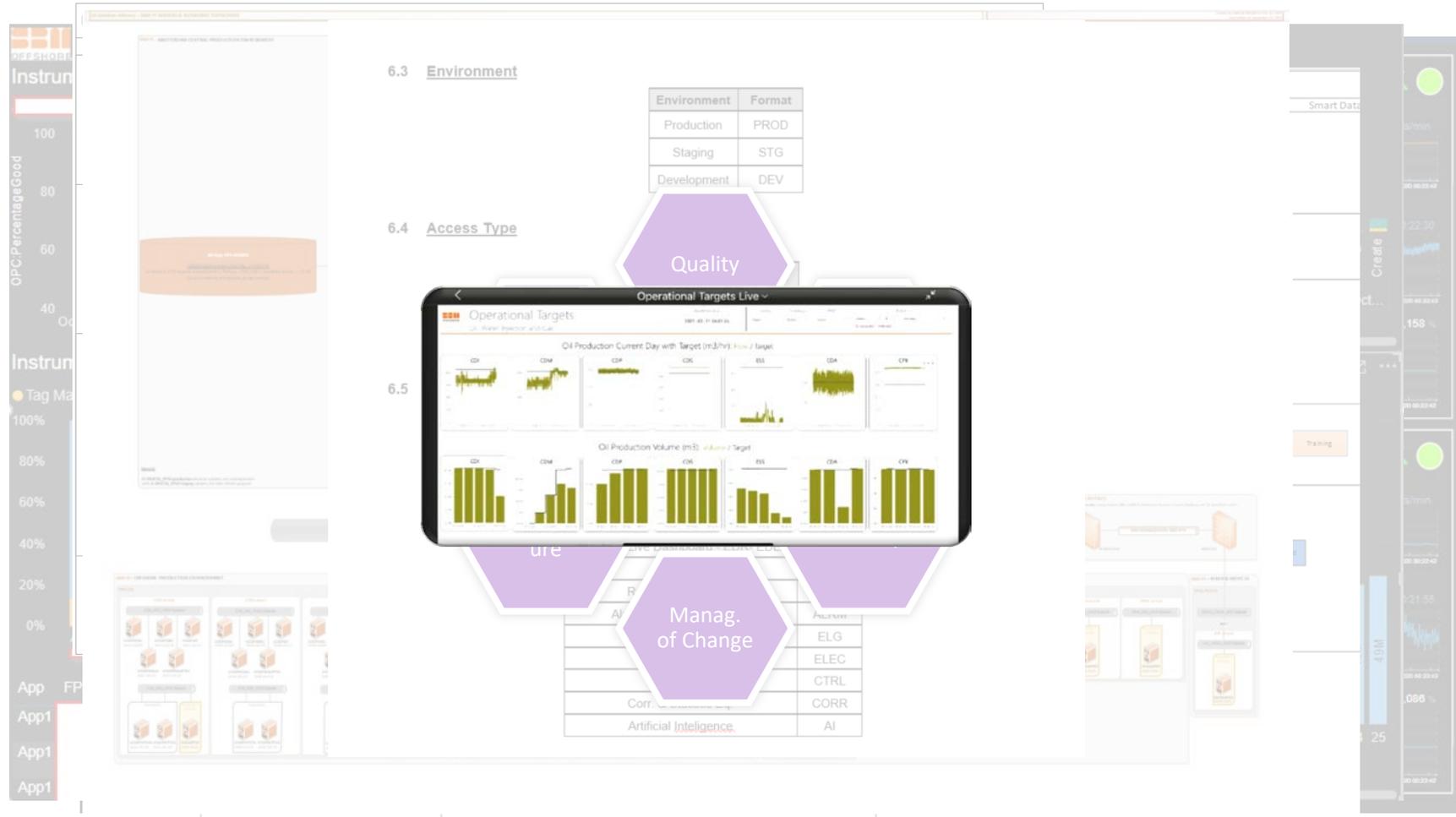
Smart Operations: the Dimension at Q1 2022



Ramp up of Signals per year from 2016 to 2021

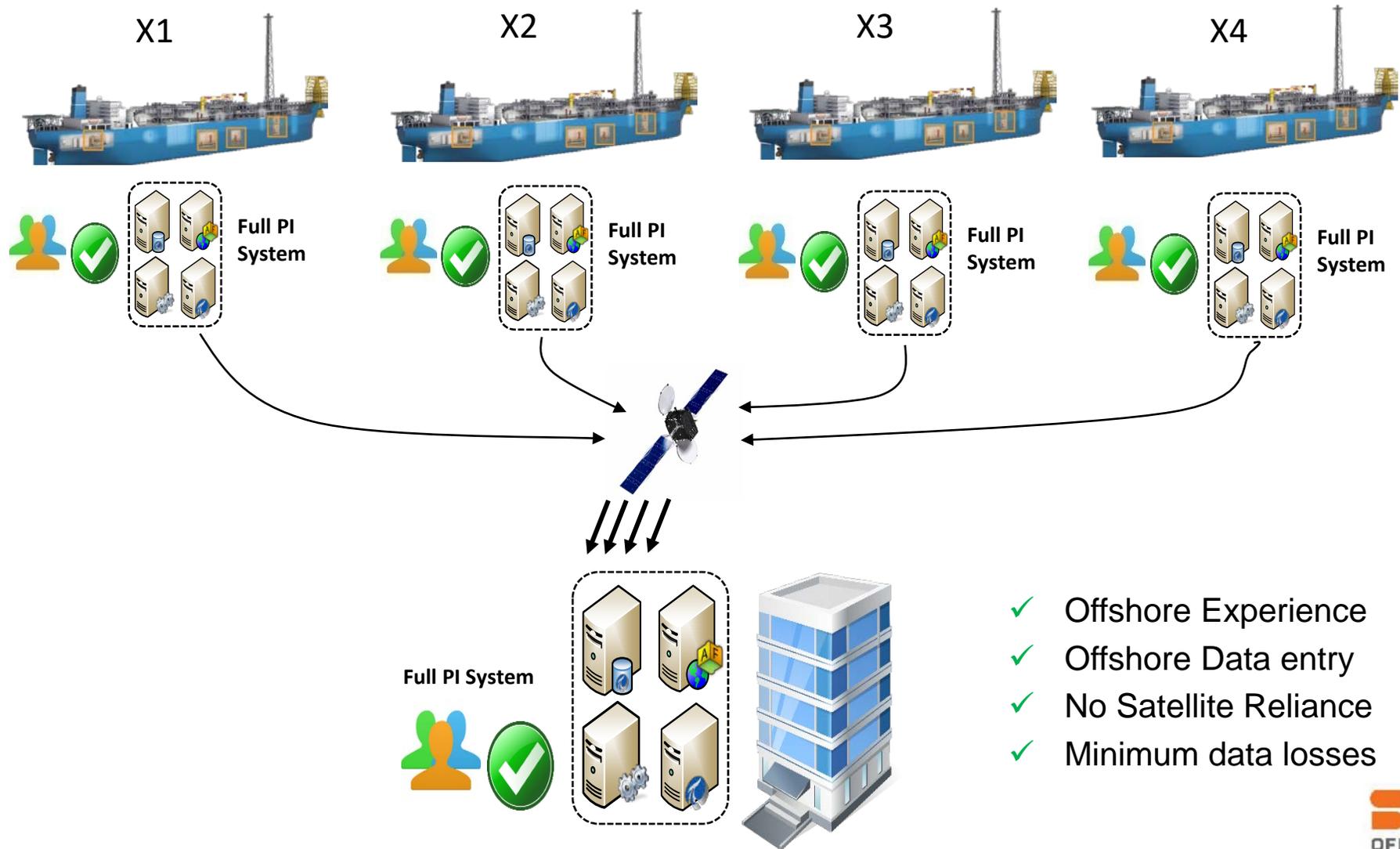


Governance



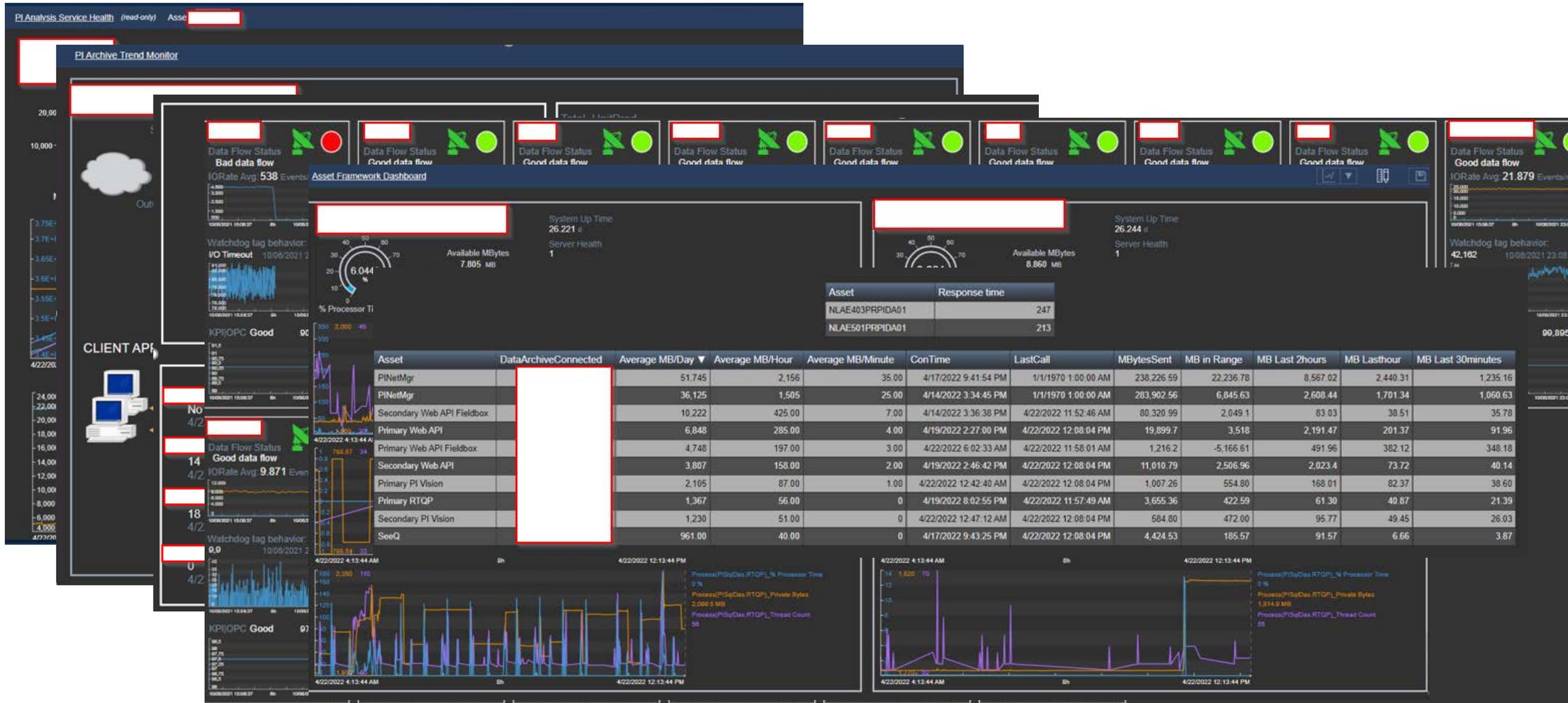
- Test data

Architecture



- ✓ Offshore Experience
- ✓ Offshore Data entry
- ✓ No Satellite Reliance
- ✓ Minimum data losses

PI System Monitoring



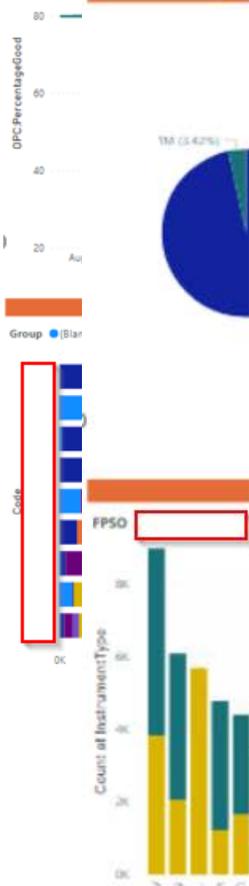
Data Quality

Overall

Region: All Group: All

Data Detail Application

Region: Origin: Area: Group: Server: All: PRD



Navi

- App1
- App4
- PM
- CDI
- REM

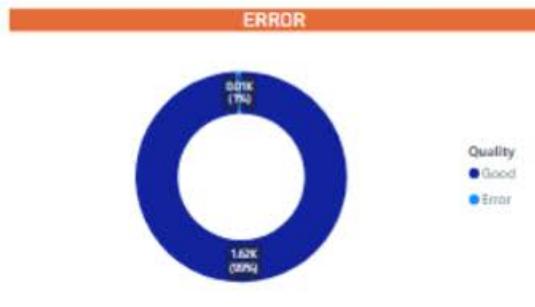
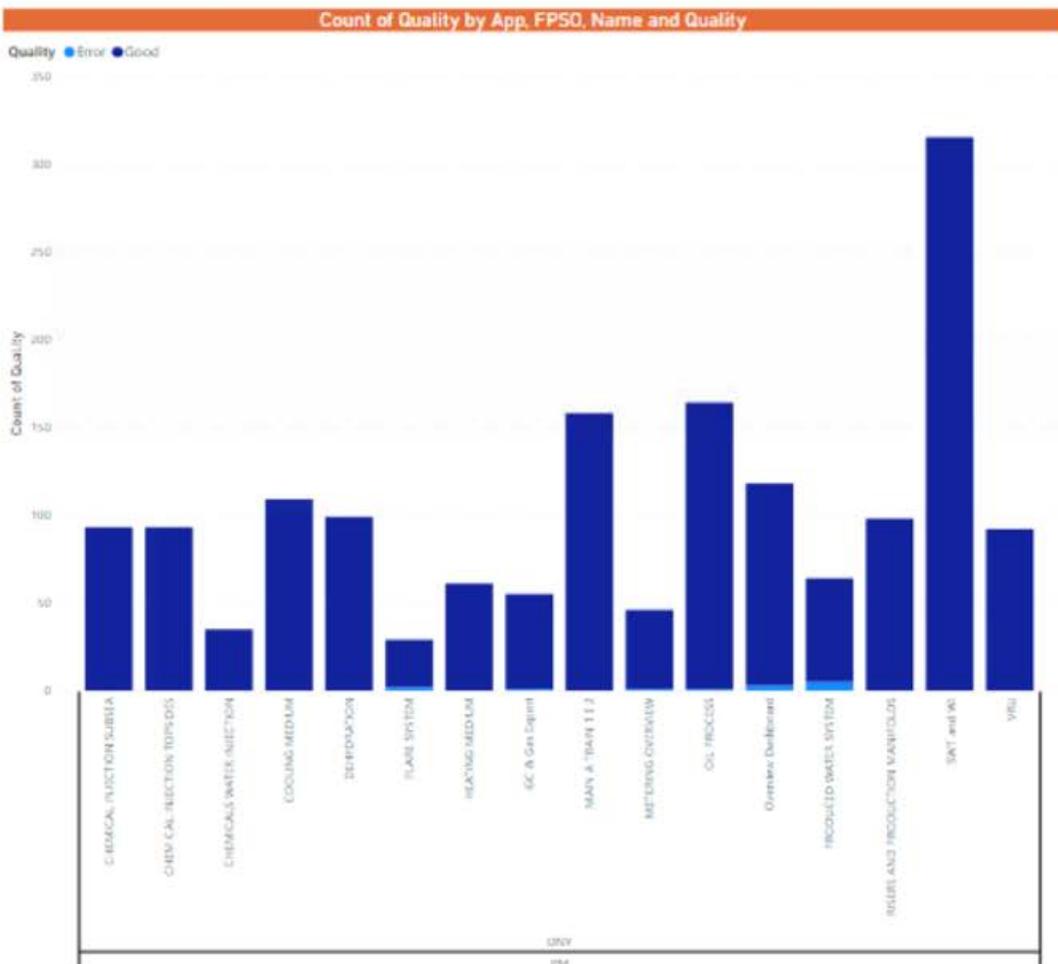
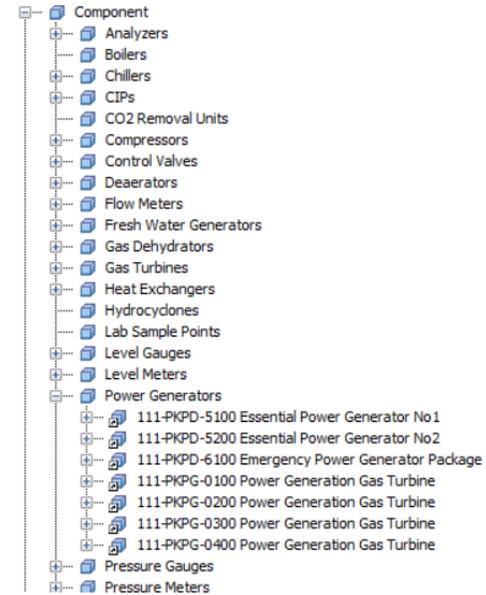
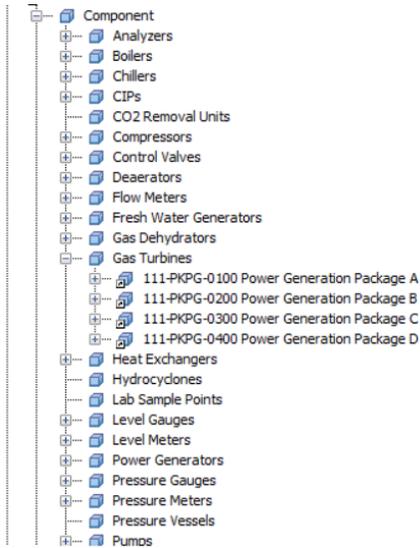
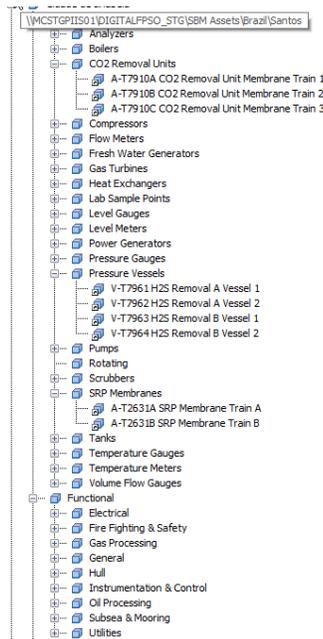


Table View

App	FPSO	Point	Name	Value
PM		FI-2	0.044	
PM		FI-2	0.257	
PM		FI-2	0.005	
PM		FI-2	0.126	
PM		FI-2	0.0001	
PM		FI-2	0.038	
PM		FI-2	165.80	
PM		FI-2	0.000	
PM		FI-2	0.049	
PM		LSI	88.611	
PM		LSI	1.6729	
PM		LSI	23.089	
PM		LSI	9.0326	
PM		LSI	22.561	
PM		PCV	0.719	
PM		PCV	0.1437	
PM		PCV	0	
PM		PCV	2.8732	
PM		PCV	0.060	
PM		PDI	0.0486	
PM		PD	0.0766	
PM		PDI	0.1608	
PM		PD	0.0965	
PM		PD	0.0094	
PM		PD	0.1085	
PM		PC	2.8614	
PM		PC	1	
PM		PC	2.9000	

Data Structure Standardization



Use Cases

Monitoring

The image displays six vertical panels, each representing a different monitoring use case. The panels are arranged horizontally and are set against a dark purple background. Each panel has a title at the top and a corresponding screenshot of the monitoring interface below. The use cases are: Process, Rotating Equipment, Critical Valves, Corrosion, Control Loops, and Fire & Gas. The screenshots show various data visualizations, including process flow diagrams, status indicators, and data tables.

Use Cases

Dashboards

Management



Technical



Emission 0



Data Science (Intelligent agents)



Molecular sieves



Dry Gas Seal



Oil Separator



Mooring



Sea Water Treatment



Power Generation



Heat Exchanger



Instrumentation

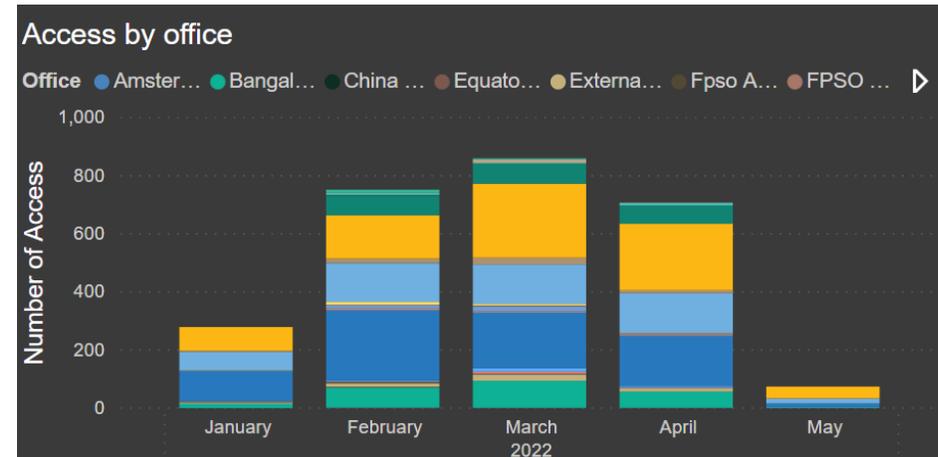
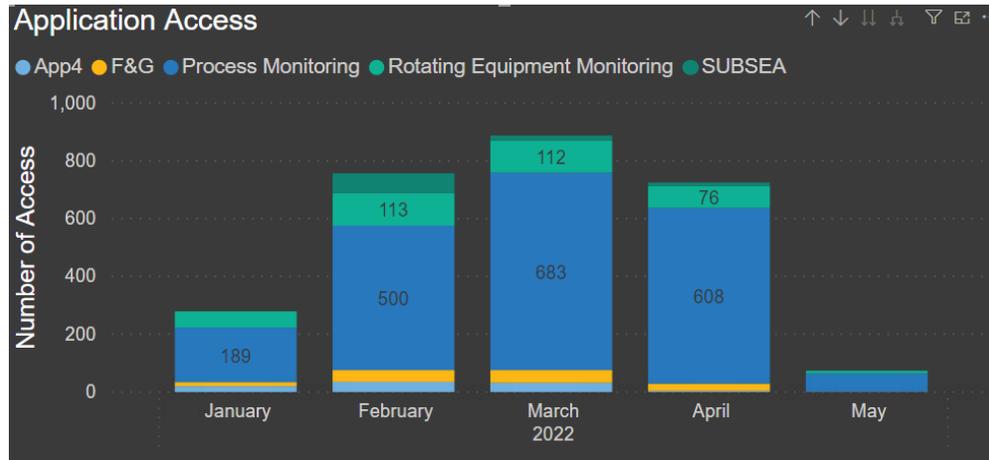


Bearing temperature

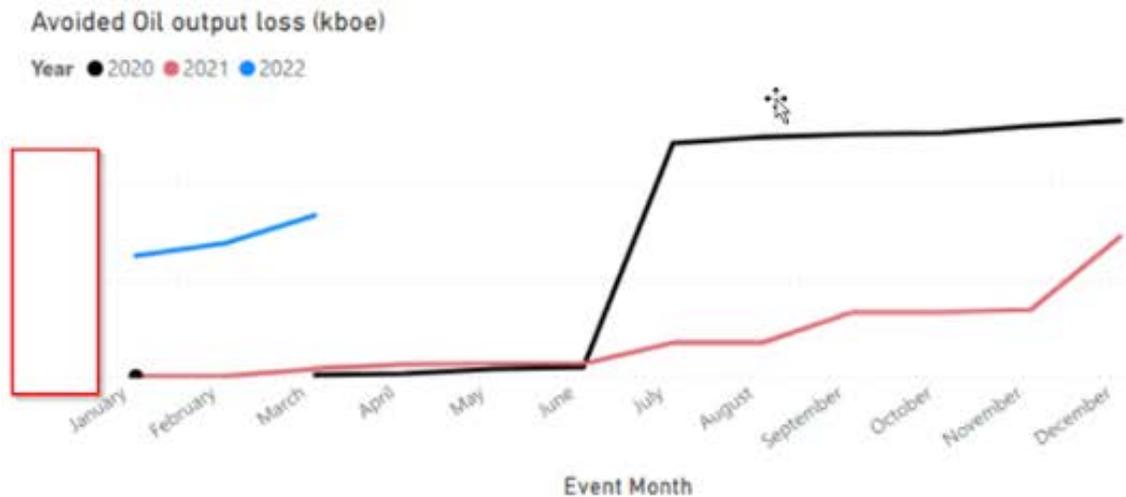


Vibration

Adoption



Value creation



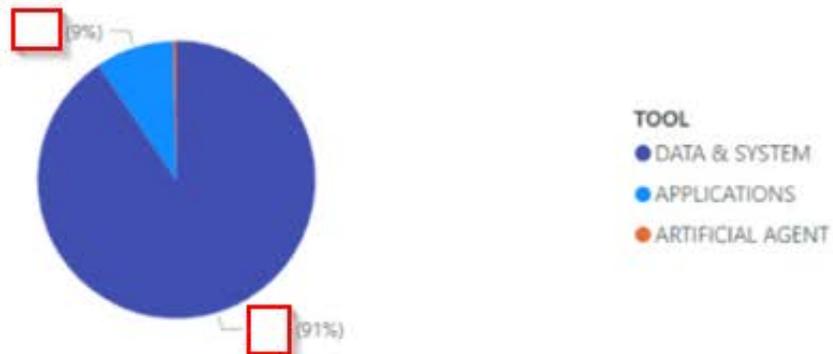
Validation Year

2020	2021	2022
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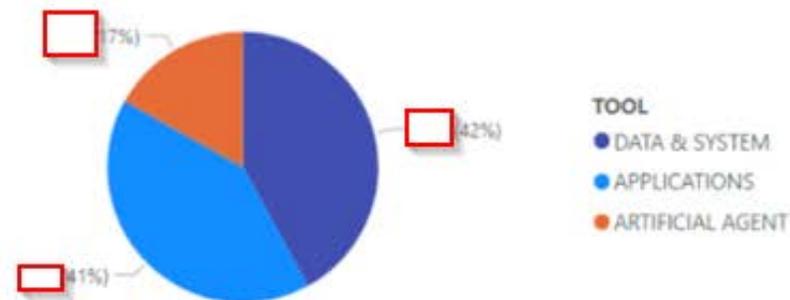
Value per FPSO

FPSO	Catches #	Avoided Oil output loss (kboe)	Avoided WI loss ('000m3)
	32		
	20		
	3		
	6		
	22		
	18		
	11		
	6		
	9		
Total	127		

Avoided Oil Output loss (kboe) by TOOL



Avoided Water Injection loss ('000 m3) by TOOL



Avevanet

- EPCI Digital twin solution chosen for one project
- Structure and integrate EPC data to make available to operations
- In principle no native integration with the PI System

Avevanet

The screenshot displays the Avevanet PI Vision interface. At the top, the browser tabs include 'Dashboard', 'PFD - UNY/PTY - Oil Process - ...', '124-PST-0142 - WP from Prod...', and a selected tab for '124-PSI-0142'. The main header shows 'OSIsoft PI Vision' and a 'Display: Click Save Icon' instruction. The central area features a 'Live Trends' chart with a blue line graph on a dark background. A vertical toolbar on the left is labeled 'EVA NET Dashboard'. On the right, a 'Related Items' panel lists various data points under categories like 'List - (11)', 'Live Trends - (11)', and 'Monitoring Display - (7)'. The 'Live Trends' list includes items such as '24-PSI-0142 - [redacted] 124-PSI-0142', '24-PSI-0142_H_ALARM - [redacted] 124-P...', '24-PSI-0142_H_LIM - [redacted] 124-PSI-C...', '24-PSI-0142_HH_ALARM - [redacted] 124...', '24-PSI-0142_HH_LIM - [redacted] 124-PSI...', '24-PSI-0142_HH_MOS_C - [redacted] 124...', '24-PSI-0142_L_ALARM - [redacted] 124-P...', '24-PSI-0142_L_LIM - [redacted] 124-PSI-0...', '24-PSI-0142_LL_ALARM - [redacted] 124-I...', '24-PSI-0142_LL_LIM - [redacted] 124-PSI-', and '24-PSI-0142_LL_MOS_C - [redacted] 124-I...'. The 'Monitoring Display' list includes 'Riser and Production Manifolds - V0 - PFI...'. A 'Selected Tag' section at the top right shows '124-PST-0142 - WP from Prod...'.

Avevanet

Dashboard

Welcome Anisio Pamplona!

Search

Tags Docs Both

KPIs Tags Documents

- Equipments with P&ID
- Intelligent P&IDs
- Tags with Documents
- Documents with File

Information

- SBM Aveva Net Training Video and Documents
- Aveva Net User Guide

Need help with Aveva Net? Please contact Moaviya.Saboor@sbmoffshore.com

Tip of the Day

if you have permission to make markups, you can make a markup on top of any 3d drawing or hotspotted drawing. These can easily be shared with other users using the 'Copy link' action.

Your Basket

Your basket is empty.
Items added to basket will appear here.

Reports & Queries

- Project Data Completeness Report
- Data Compliance and Validation Report
- MPF - Data Population Actual vs Planned Report

NEO CCS ISM

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AVEVA NET Dashboard

Conclusion

- Data governance is key on the digital journey
- Quality is a daily challenge
- Data structure standardization is a key enabler for digital initiatives
- Internal evaluation to modularize and commercialize data governance and monitoring as a digital services

DZIĘKUJĘ CI
 NGIYABONGA
 TEŞEKKÜR EDERİM
 DANKIE
 TERIMA KASIH
 СПАСИБО
 GRAZIE
 МАХАДСАНИД
 GO RAIBH MAITH AGAT
 БЛАГОДАРЯ
 GRACIAS
 ТИ БЛАГОДАРАМ
 TAK DANKE
 RAHMAT
 HATUR NUHUN
 PAKKA PÉR
 HATUR NUHUN
 PAXMAT САГА
 CÁM ƠN BẠN
 WAZVIITA
 謝謝
 ТАРАДН ЛЕІВН
 KEA LEBONHA
 БАЯРЛАЛАА
 MISAOTRA ANAO
 WHAKAWHETAI KOE
 DANKON TANK TAPADH LEAT
 MATUR NUWUN
 ХВАЛА ВАМ
 MULŢUMESC
 고맙습니다
 GRAZIE
 شکرا
 HVALA
 FAAFETAİ
 ESKERRIK ASKO
 HVALA
 TEŞEKKÜR EDERİM
 OBRIGADO
 MERCİ
 DI OU MÈSI
 ĎAKUJEM
 EΥΧΑΡΙΣΤΩ
 GRATIAS TIBI
 MAHALO IĀ 'ŌE
 TAKK SKALDU HA
 ありがとうございます
 SIPAS JI WERE
 TERIMA KASIH
 UA TSAUG RAU KOJ
 ТИ БЛАГОДАРАМ
 СИПОС
 KÖSZÖNÖM
 GRACIES
 SALAMAT
 MAHADSANID
 HVALA
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 SALAMAT
 GRAZZI
 PAKKA PÉR
 FALEMINDERIT
 D3ЯKYŮ