Using PI System to Enable Working From Home

OSIsoft Virtual Industry Summits

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Senior Pre-Sales Engineer
December 2020

The year 2020 has forced new changes on how you run your businesses

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“

Simply put, the pandemic forced people home—and now we find that working from home is here to *stay*.

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Users of PI System are uniquely empowered for successfully working from home

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PI Vision - DHB_CBM-L3-ErgoBlo

dfwebapp.osisoft.com/PIVision/#/Displays/230/DHB_CBM-L3-ErgoBloc-Parts-Filler-Motor

OSIsoft PI Vision

New Display | OSI\dlopez

DHB_CBM-L3-ErgoBloc-Parts-Filler … (read-only) (explorer-mode) Asset: Filling Machine Motor ▼ Export

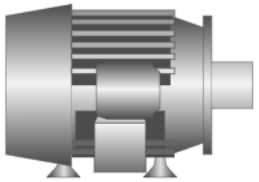
Double Hop Brewery

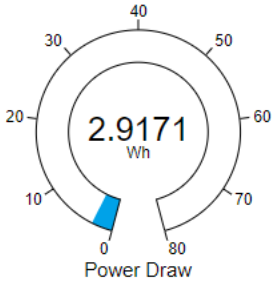
Montreal Brewery

- Home
- Production Report
- OEE
- Brewhouse
- Fermentation
- Clean In Place
- Packaging

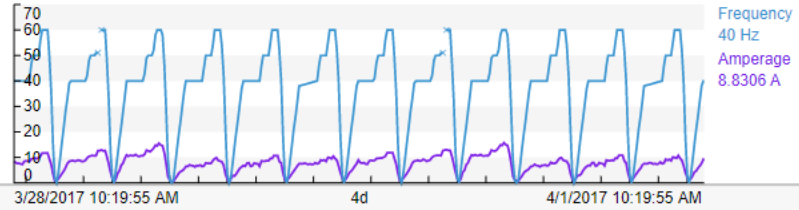
Back

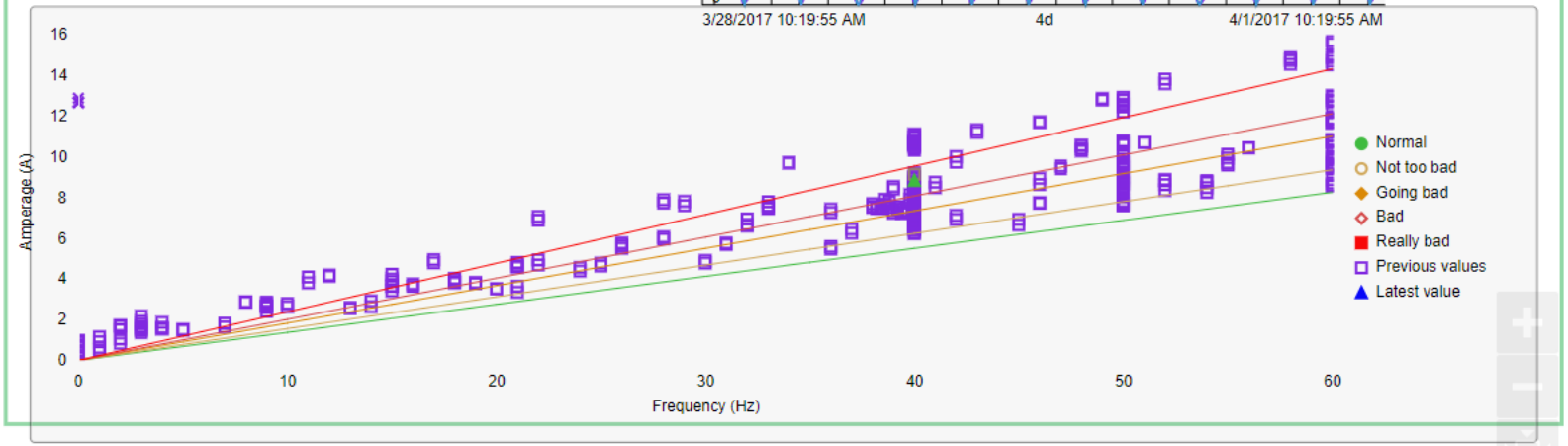
Filler Motor





Name	Value	Units
Filling Machine Motor|Daily Run Hrs	0	h
Filling Machine Motor|Manufacturer Sug Max Run Hours	2,000	h
Filling Machine Motor|Run Hours Since Last Maintenance	2,263.6	h
Filling Machine Motor|Max Days Until Next Maintenance	-10.983	d





Configure XY Plot ▼

X Data Options

Attribute: **Frequency|Normal**

Data Retrieval: Compressed

☑ Use Custom Time Range

Start ○ Offset ◉ Time: 12/1/2015 12:00:00…

End ○ Offset ◉ Time: 12/1/2016 12:00:00…

Y Data Options

Attribute: **Amperage|Normal**

Data Pairing to X

◉ Paired by timestamp

○ Paired by position in the list

Data Retrieval: Interpolated

Y Data Options

3/28/2017 10:19:55 AM | ↺ | ◀ 4d ▶ | Now | 4/1/2017 10:19:55 AM

OSIsoft Cloud Services

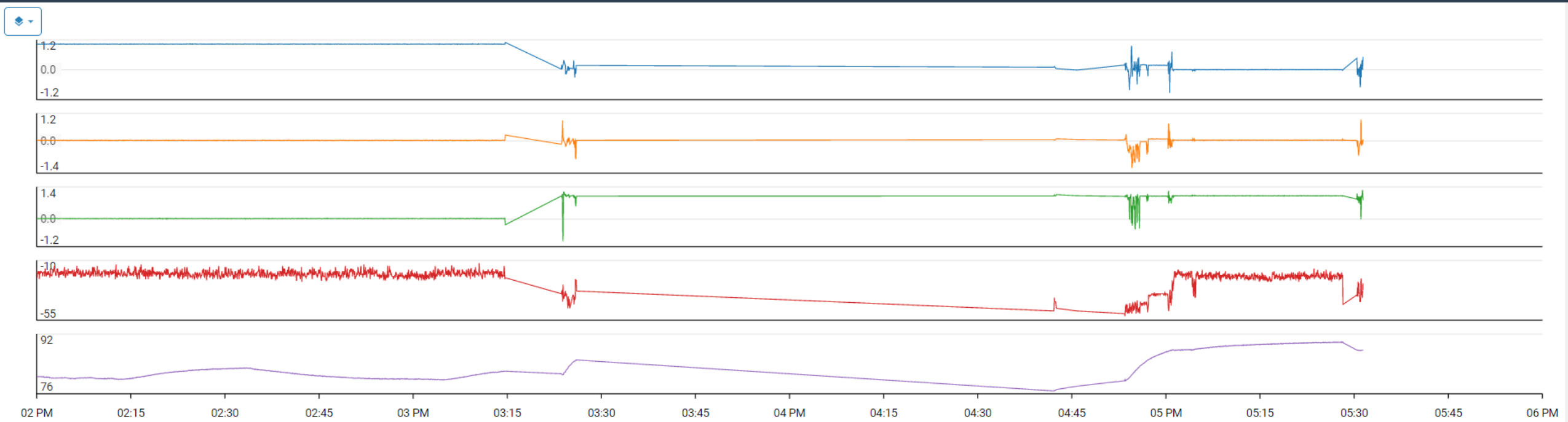
cloud.osisoft.com/trend

OSIsoft Cloud Services

Dan Lopez OSIsoft Events

Development

RESET



10/31/2020 2:00:00 PM to 10/31/2020 6:00:00 PM

Name	Timestamp	Value	UOM	Min	Max	Avg
Electric Imp Explorer 0c2a69052a40 Data Values | X Acceleration	10/31/2020 5:31:25 PM	0.516		-0.936	1.096	0.456
Electric Imp Explorer 0c2a69052a40 Data Values | Y Acceleration	10/31/2020 5:31:25 PM	0.068		-1.176	0.936	0.037
Electric Imp Explorer 0c2a69052a40 Data Values | Z Acceleration	10/31/2020 5:31:25 PM	0.816		-0.960	1.268	0.649
Electric Imp Explorer 0c2a69052a40 Data Values | Wi-Fi RSSI	10/31/2020 5:31:25 PM	-32.000		-52.000	-12.000	-30.854
Electric Imp Explorer 0c2a69052a40 Data Values | Temperature	10/31/2020 5:31:25 PM	87.757		76.739	89.921	82.805

Secure remote operations

Safely and **reliably** work with high-fidelity data using **cross-platform** tools

Customize the **capabilities** and **constraints** on each user's account

Empower users with **self-service** data analysis tools

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Trust in an infrastructure that is **inherently** designed for **read-only** access

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What tools does PI System provide to aid in working from home?

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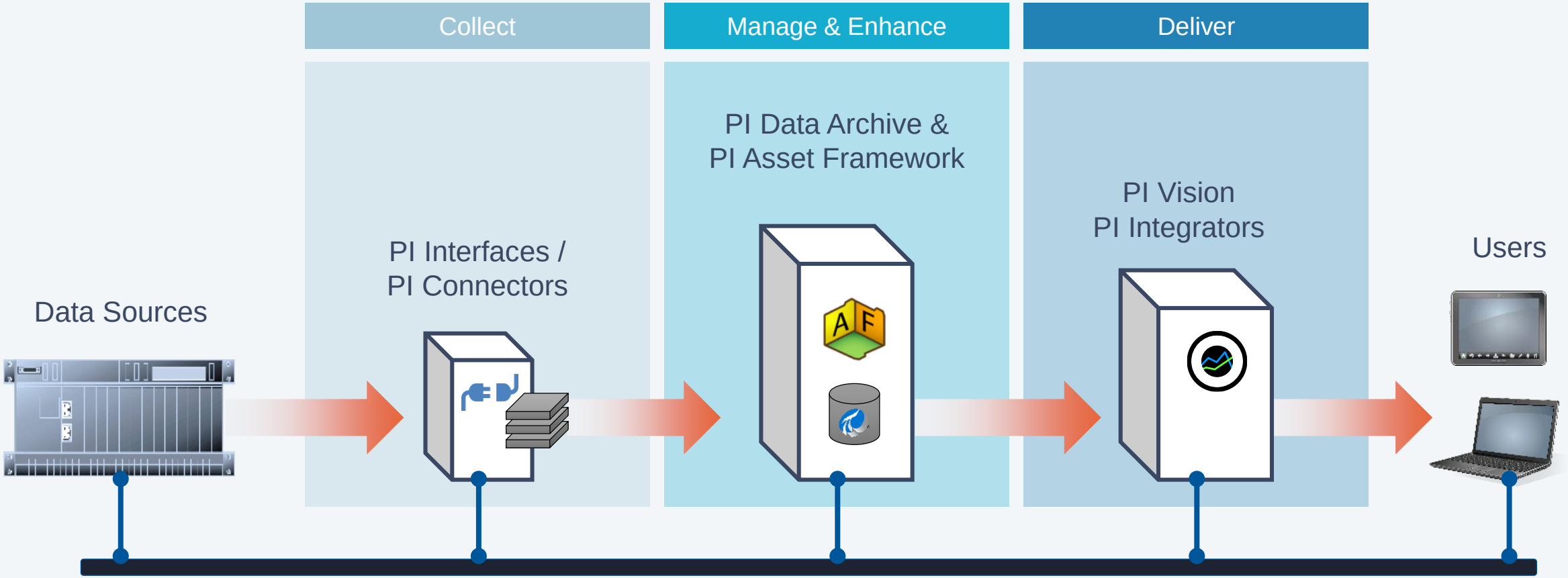
First, let's remind ourselves where these tools reside



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PI Vision

A unified visualization infrastructure to support your diverse needs across the enterprise in a seamless, powerful, extensible environment

OSIsoft.

Royal Cereals

- Home
- CCP Data
- Overview
- OEE
- Back

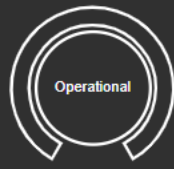
Total Produced - per Shift	Dryer L-5	Windsor Site	% Availability - per Shift
1.1007 t			100 %
Total Rejected - per Shift	**Available**	**Production Line 5**	**Downtime - per Shift**
0.20953 t			0 h

Event Name	Asset	Event Type	Start Time	End Time	Duration	Reason	Acknowledgment
Royal Cereals - OOC - - Dryer L-5 - 2020-02-16 11:18:00.000 - 99.9048767089844	Dryer L-5	Royal Cereals - Out of Control Event	2/16/2020 1:18:00 PM	In Progress	16d 20h	Incorrect Burner Control	
Royal Cereals - OOC - - Dryer L-5 - 2020-02-18 14:25:00.000 - 92.9032363891602	Dryer L-5	Royal Cereals - Out of Control Event	2/18/2020 4:25:00 PM	In Progress	14d 17h		
Royal Cereals - OOC - - Dryer L-5 - 2020-02-19 20:45:00.000 - 90.1590042114258	Dryer L-5	Royal Cereals - Out of Control Event	2/19/2020 10:45:00 PM	In Progress	13d 11h	Incorrect Burner Control	
Royal Cereals - OOC - - Dryer L-5 - 2020-02-21 01:59:00.000 - 99.8247299194336	Dryer L-5	Royal Cereals - Out of Control Event	2/21/2020 3:59:00 AM	In Progress	12d 5h	Incorrect Burner Control	Acknowledge
Royal Cereals - OOC - - Dryer L-5 - 2020-03-03 09:04:00.000 - 99.5110473632813	Dryer L-5	Royal Cereals - Out of Control Event	3/3/2020 11:04:00 AM	3/3/2020 11:08:00 AM	4m		Acknowledge
Royal Cereals - OOC - - Dryer L-5 - 2020-03-03 09:36:00.000 - 93.2033233642578	Dryer L-5	Royal Cereals - Out of Control Event	3/3/2020 11:36:00 AM	3/3/2020 11:47:00 AM	11m	Incorrect Burner Control	
Royal Cereals - OOC - - Dryer L-5 - 2020-03-03 09:43:00.000 - 86.3664855957031	Dryer L-5	Royal Cereals - Out of Control Event	3/3/2020 11:43:00 AM	3/3/2020 11:46:00 AM	3m	Incorrect Burner Control	Acknowledge

Total Produced - per Day

Total Rejected - per Day

Reject Valve Status



Reason Code

Double Hop Brewery — Fermentor 09 — Montreal Brewery

Home
Production Report
OEE
Brewhouse
Fermentation
Clean In Place
Packaging

Back

Cooling
11/18/2020 7:48:39 AM
Status

Big Geek
Brand

Availability:	100.00 %
Performance:	100.00 %
Quality:	90.23 %
OEE (last 24h)	90.227 %

0 °F

0 °F

51.855 °F

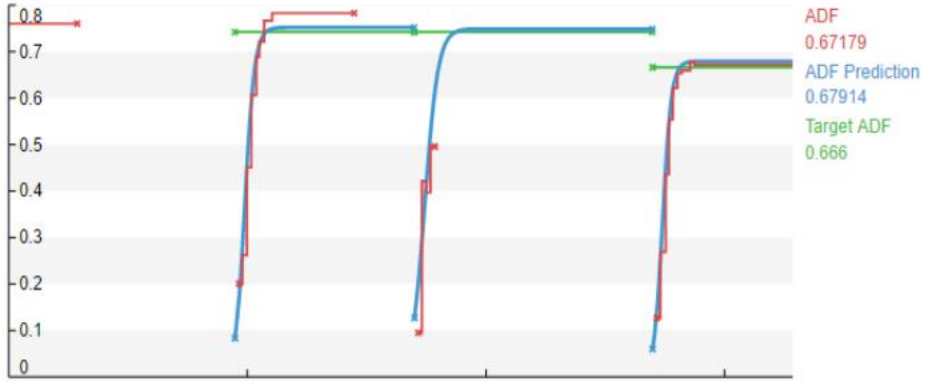
Description	Value	Units
Vessel Volume	43.16	bbl
Vessel Pressure Process Value	0	psi
The specific gravity of the vessel in plato	2.8	°P
The specific gravity of the vessel in plato at the end of filling	24.7	°P

= Down/Available
= Production

Launch Batch Comparison Window

Check Downtime Events

Apparent Degree of Fermentation (ADF)



Royal Cereals

Home
CCP Data
Overview
OEE

Weekday 5
Current Shift 1

	Production	Packaging
Shift Performance	34.314 %	55.363 %
Shift Quality	37.787 %	87.05 %
Shift Production	8.3497 t	6,936 Cases
Shift Production Target	24.333 t	17,400 Cases
Shift Electricity Consumed	59,360 kWh	21,645 kWh

PI Vision - Hourly Performance D

dloserver2016r2/PIVision/#/Displays/50100/Hourly-Performance-Data

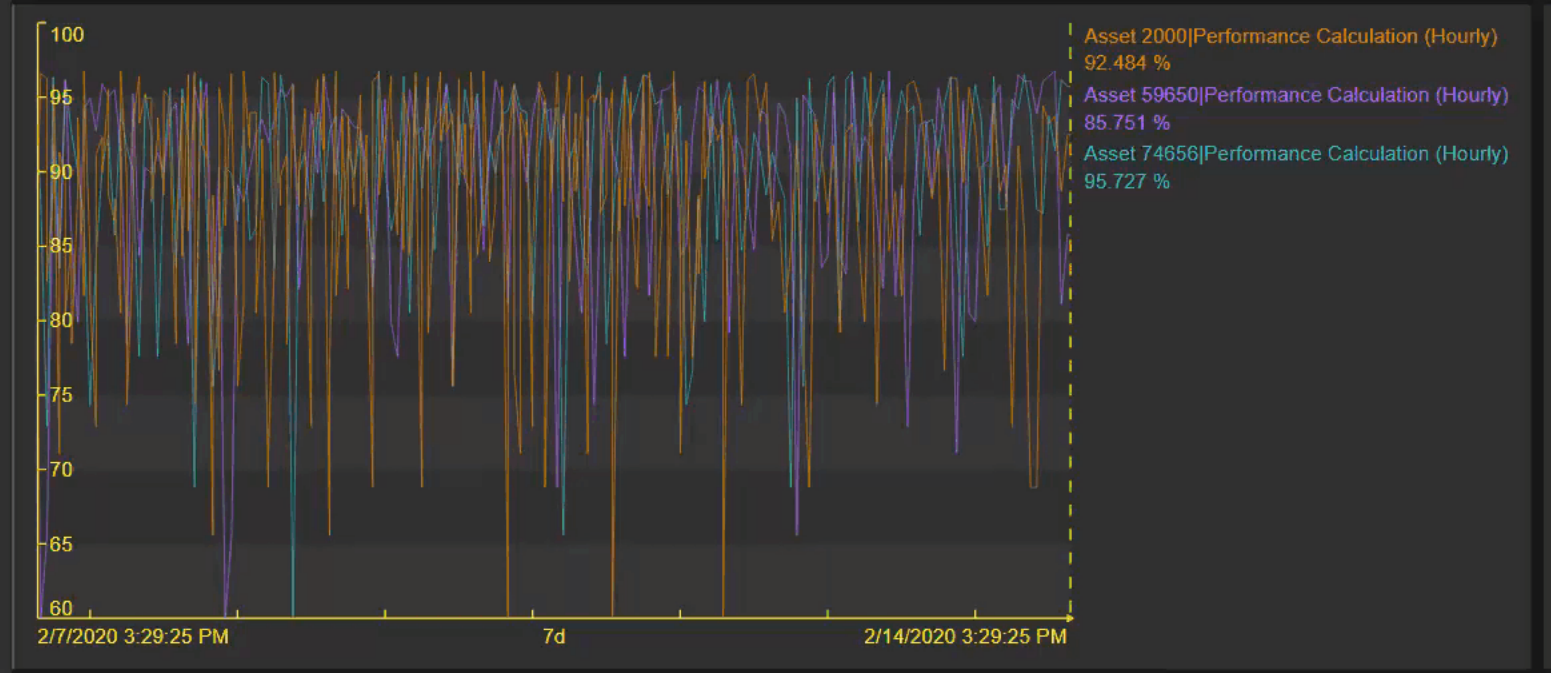
OSIsoft PI Vision

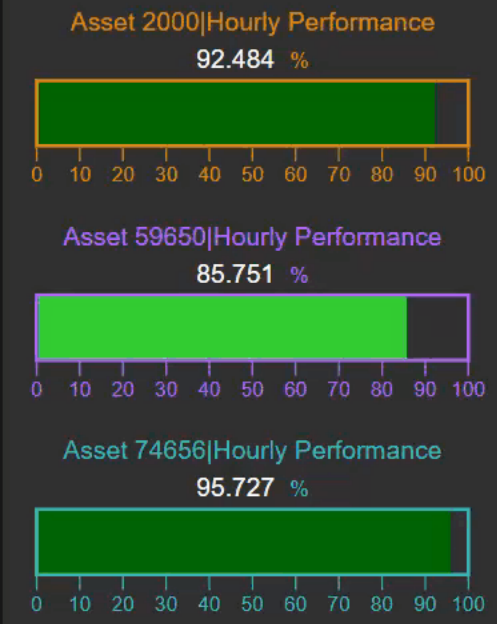
New Display | DLOSERVER2016R2\Administrator

Hourly Performance Data *(read-only)* Asset: Asset 2000+

PI Vision Home

Hourly Performance Monitoring

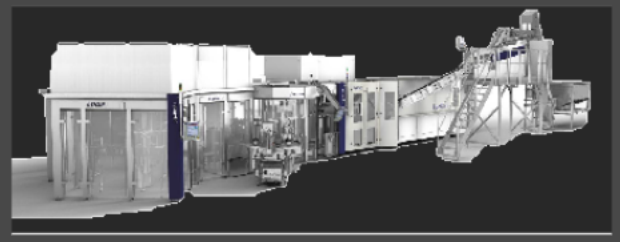




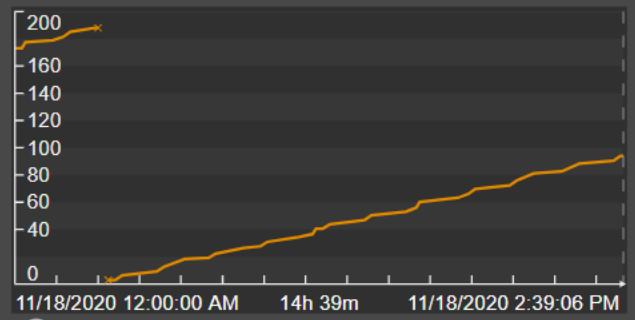
Path	Value	Units	Time	Trend	Average	Minimum	Maximum
\\DLOSERVER2016R2\DB1\Performance Monitoring\Asset 2000|Performance Calculation (Hourly)	92.484	%	2/14/2020 3:00:00 PM		88.361	60	96.761
\\DLOSERVER2016R2\DB1\Performance Monitoring\Asset 59650|Performance Calculation (Hourly)	85.751	%	2/14/2020 3:00:00 PM		89.428	60	96.761
\\DLOSERVER2016R2\DB1\Performance Monitoring\Asset 74656|Performance Calculation (Hourly)	95.727	%	2/14/2020 3:00:00 PM		89.891	60	96.761

2/7/2020 3:29:25 PM | 7d | Now | 2/14/2020 3:29:25 PM

FoodCo RX



24 Hour Plant Production



Plant Summary

Status:

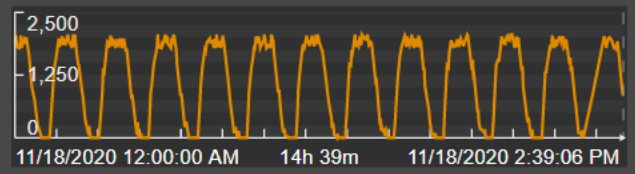
OEE: 82.27%

Quality: 92.48 %

Availability: 82.27%

Line 1

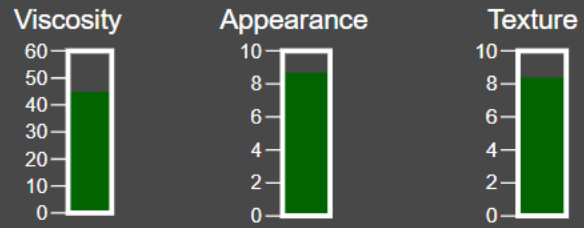
Production Rate



Batch Information

Name	Value ▼
RX100|Phase	XFER_OUT
RX100|Batch ID	WN:CHEM:RX100:20201118 12:39
RX100|Recipe	Recipe 456
RX100|Product	Prod B
RX100|Procedure	LONG

Last Batch Quality



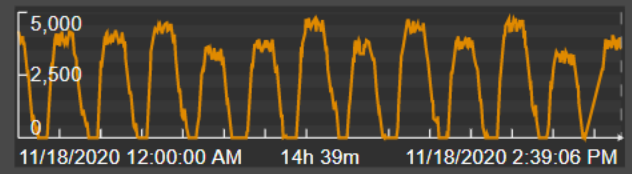
Equipment Status

Dispersion Tank 1: Heat Ex:

Dispersion Tank 2: Pumps:

Line 2

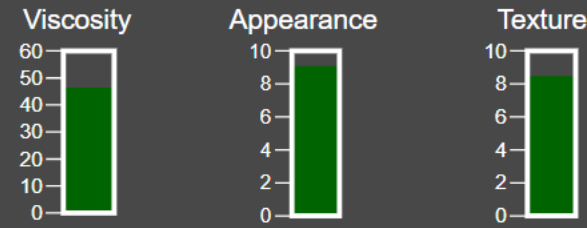
Production Rate



Batch Information

Name ▲	Value
RX200|Batch ID	WN:CHEM:RX200:20201118 12:39
RX200|Phase	XFER_OUT
RX200|Procedure	SHORT
RX200|Product	Prod A
RX200|Recipe	Recipe 456

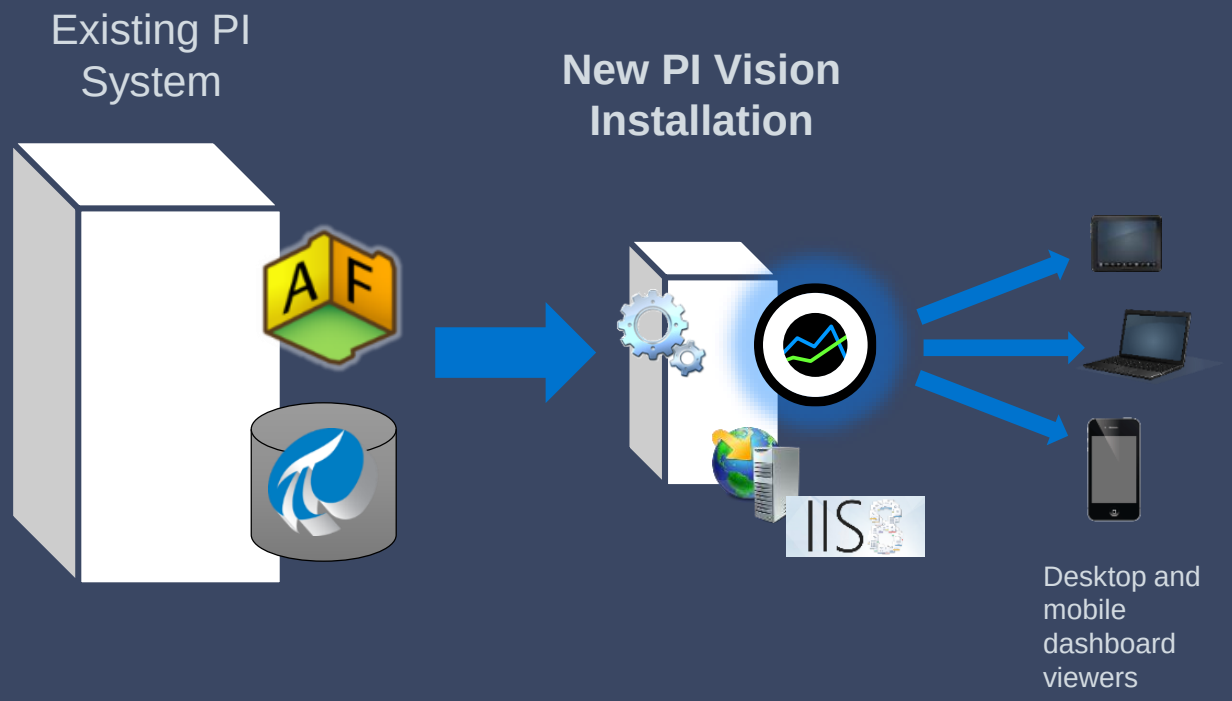
Last Batch Quality



Equipment Status

Dispersion Tank 3: Heat Ex:

Dispersion Tank 4: Pumps:



A single installation of PI Vision supports multiple concurrent mobile and desktop users

Install and maintain only the single PI Vision software installation, instead of managing software on each user's device

PI Vision can be exposed across the internet or via VPN to allow viewing data from anywhere in the world!

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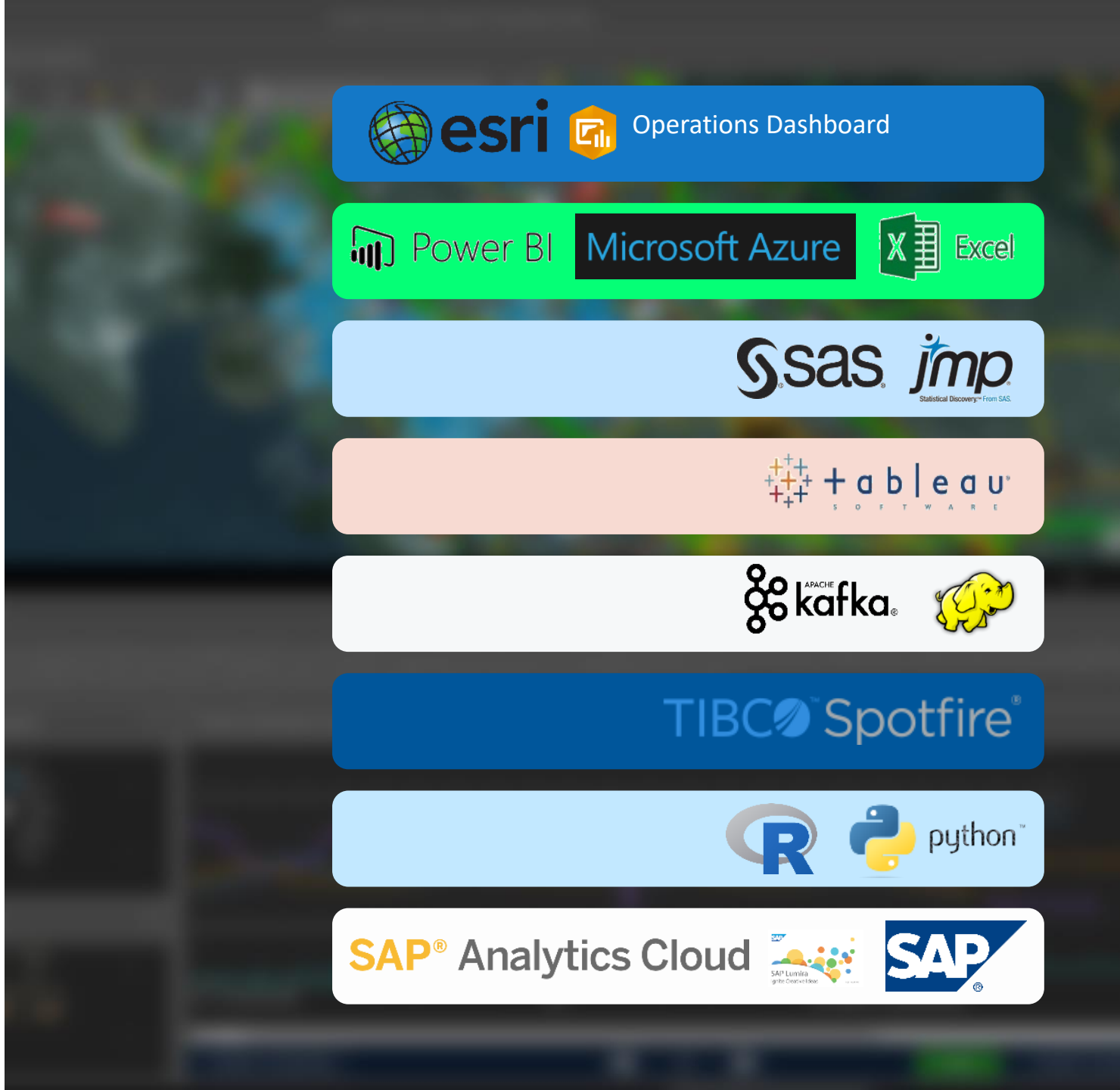
PI Integrators

Publish large-scale real-time exports and streams of PI System data and metadata to third-party geospatial, big data, or business analysis platforms



OSIsoft.

Equipment Health Investigation Report - Power BI Desktop

File | Home | View | Modeling

Daniel Lopez

Paste | Cut | Copy | Format Painter — Clipboard

Get Data | Recent Sources | Enter Data | Edit Queries | Refresh — External data

Solution Templates | Partner Showcase — Resources

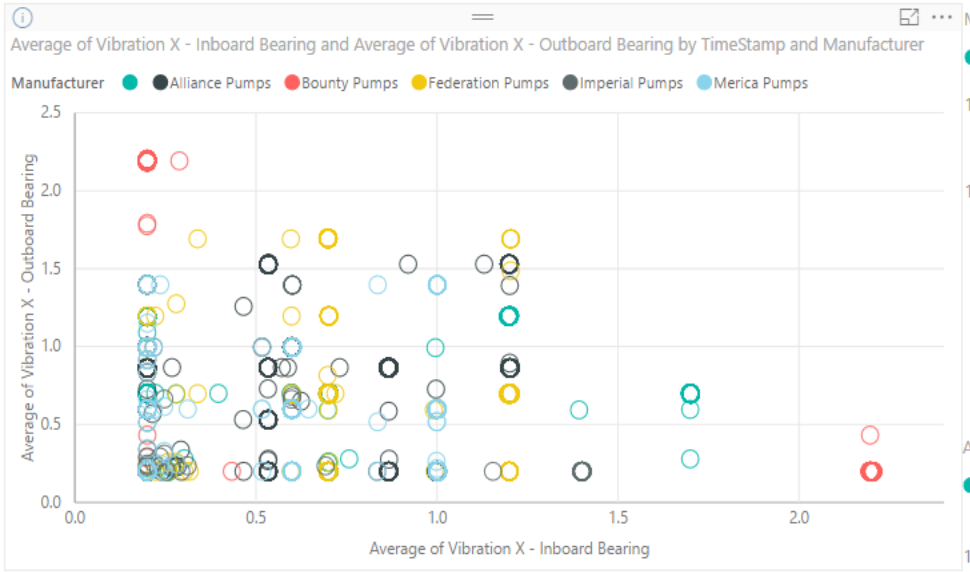
New Page | New Visual | Text box | Image | Shapes — Insert

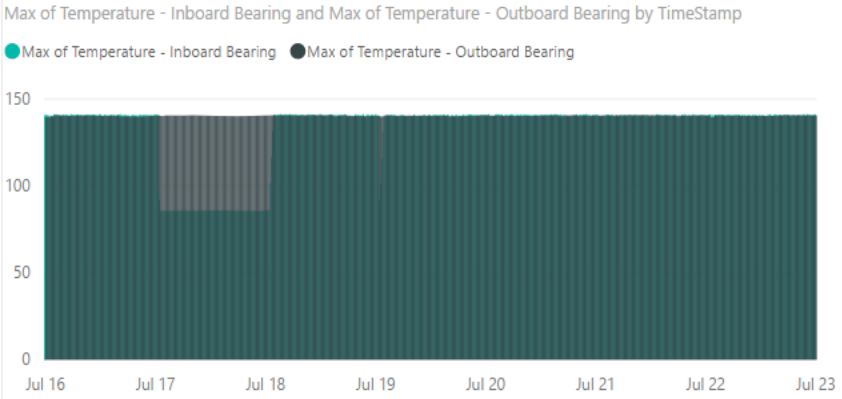
From Store | From File — Custom visuals

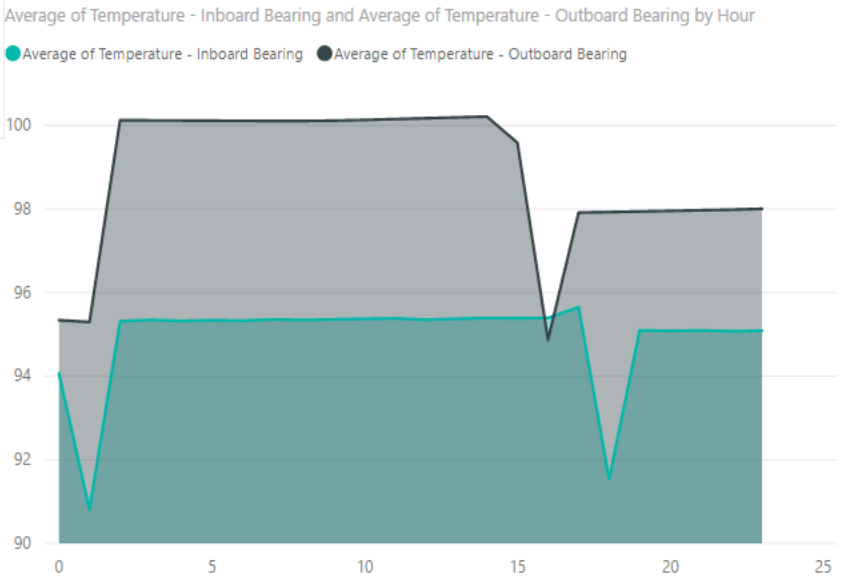
Manage Relationships — Relationships

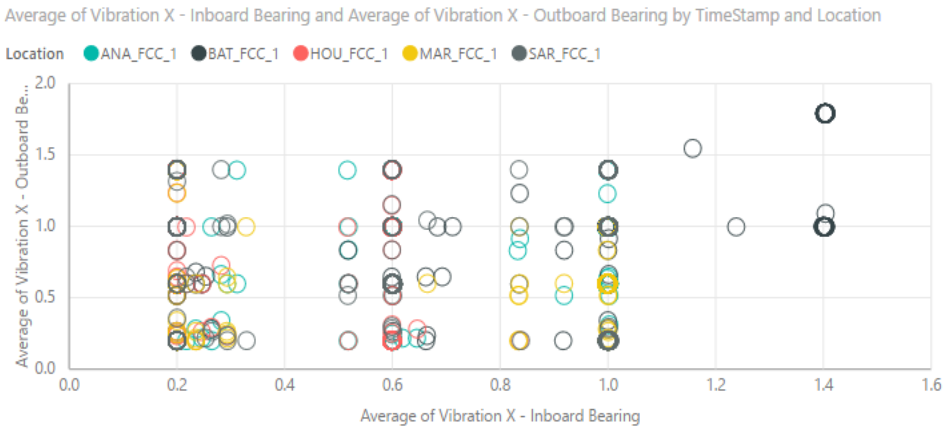
New Measure — Calculations

Publish — Share









Visualizations

Values
Drag data fields here

Filters
Page level filters
Drag data fields here
Report level filters
Drag data fields here

Fields
Search
Equipment Health Investigation
Date - Installed
Date - Last Service
Day of the Week
FCC Pump Process
Hour
Id
Location
Manufacturer
PIIntShapeID
PIIntTSTicks
Serial Number
Temperature - Inboard Bearing
Temperature - Outboard Bearing
TimeStamp
Vibration X - Inboard Bearing
Vibration X - Outboard Bearing
Vibration Y - Inboard Bearing
Vibration Y - Outboard Bearing

Page 1

PAGE 1 OF 1

UPDATE AVAILABLE (CLICK TO DOWNLOAD)

What can success look like for you?

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DEMONSTRATION

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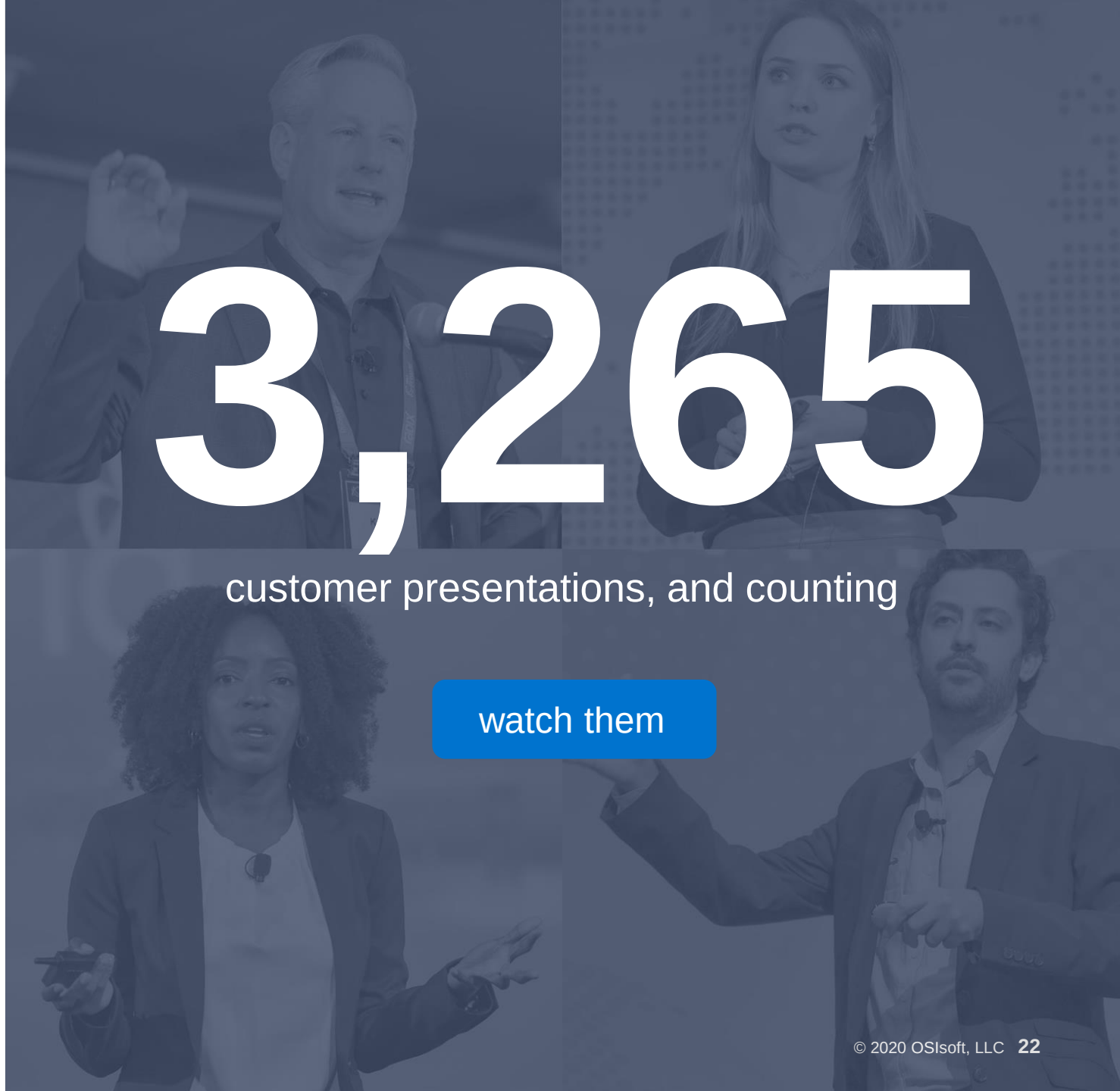
We invite you to listen to success stories from your peers



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Thank you.

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