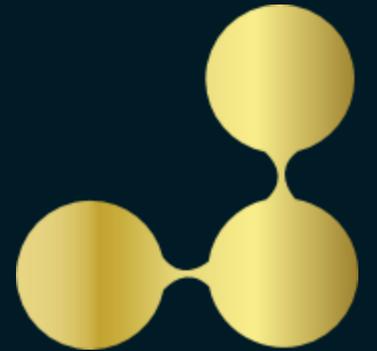
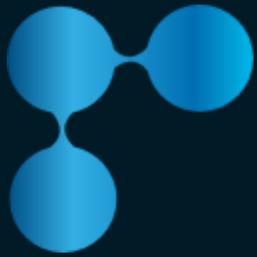


SeeQ[®]

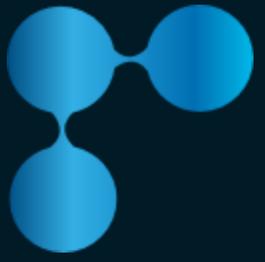
connect

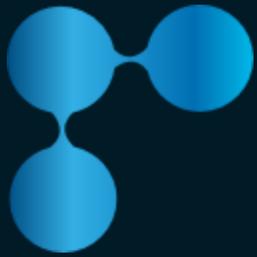




MARK DERBECKER
CHIEF PRODUCT OFFICER







Our focus:

Seeq®

INDUSTRIAL ENTERPRISE
MONITORING™ SUITE

+ AI

conneqt





Self-Service Analytics

Seeq[®] WORKBENCH

Seeq[®] ORGANIZER



Self-Service Analytics

Seeq® WORKBENCH

Seeq® ORGANIZER

Scale Across Assets

Seeq® WORKBENCH





Self-Service Analytics

SeeQ WORKBENCH

SeeQ ORGANIZER

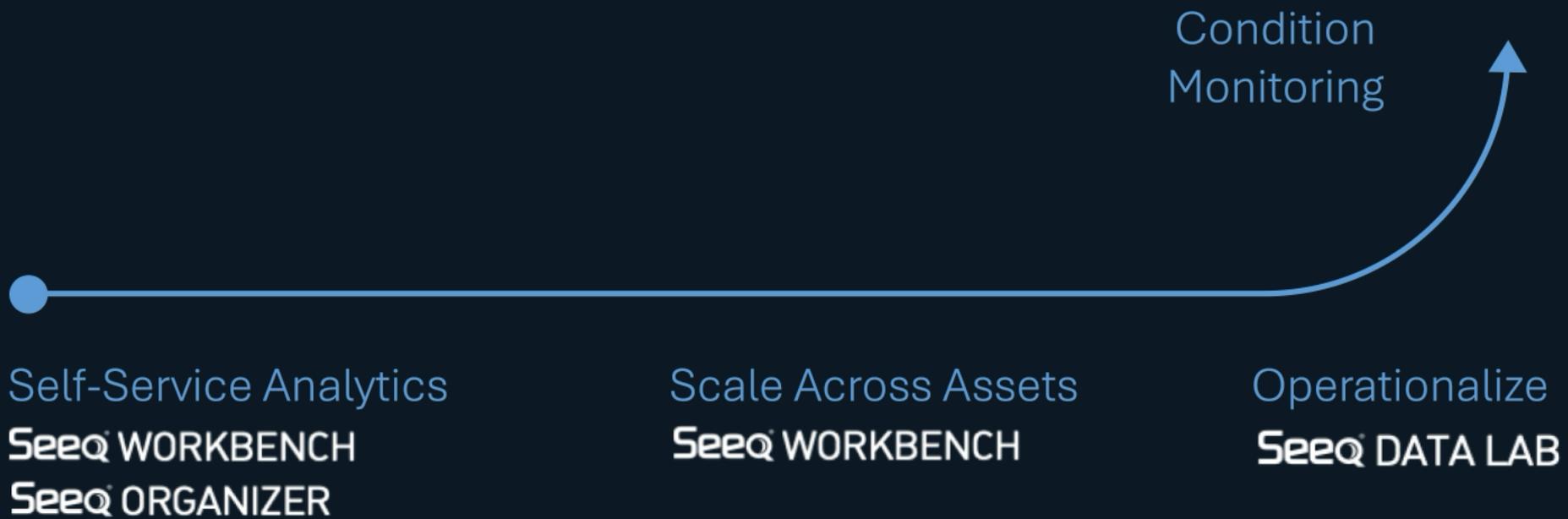
Scale Across Assets

SeeQ WORKBENCH

Operationalize

SeeQ DATA LAB











The Insights Pyramid



The Insights Pyramid



The Insights Pyramid

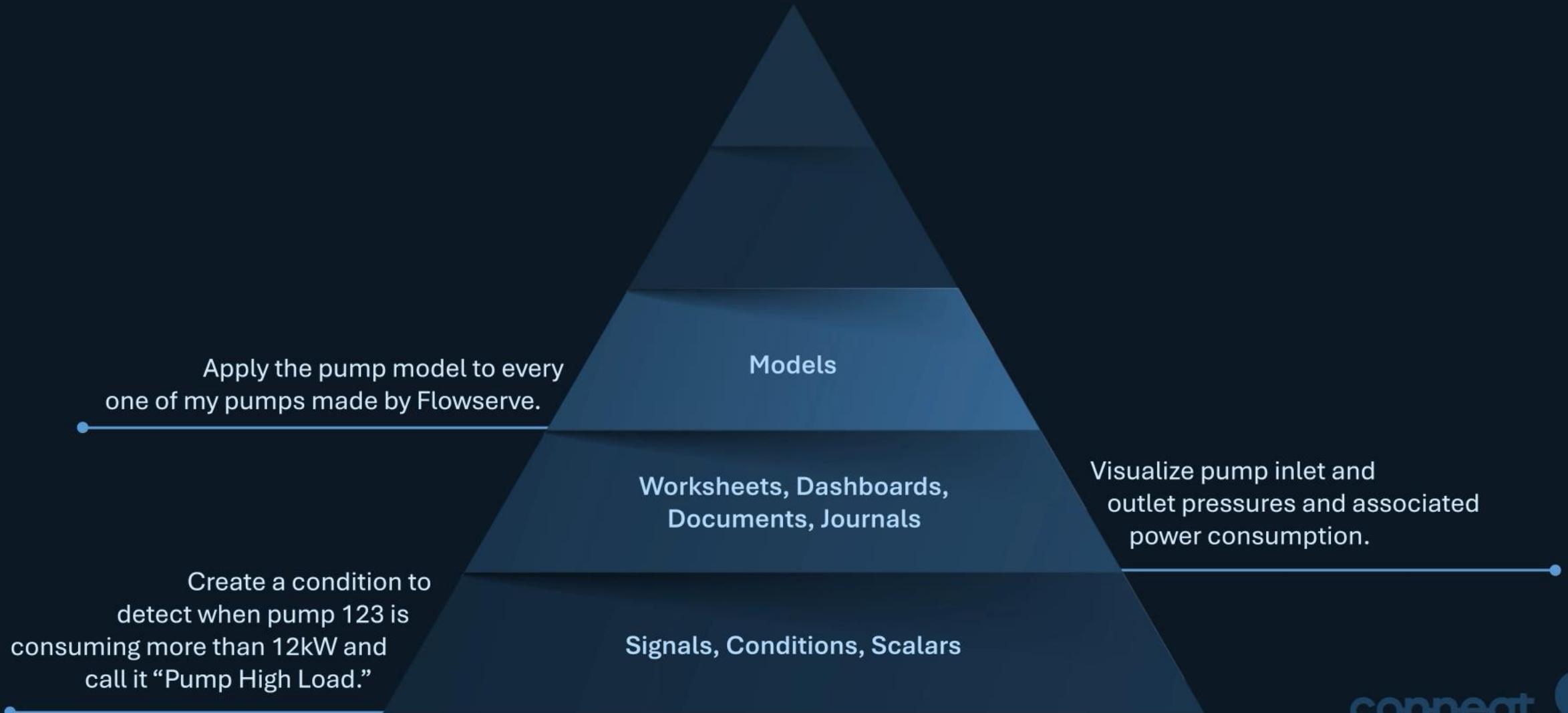
Create a condition to detect when pump 123 is consuming more than 12kW and call it "Pump High Load."

Signals, Conditions, Scalars

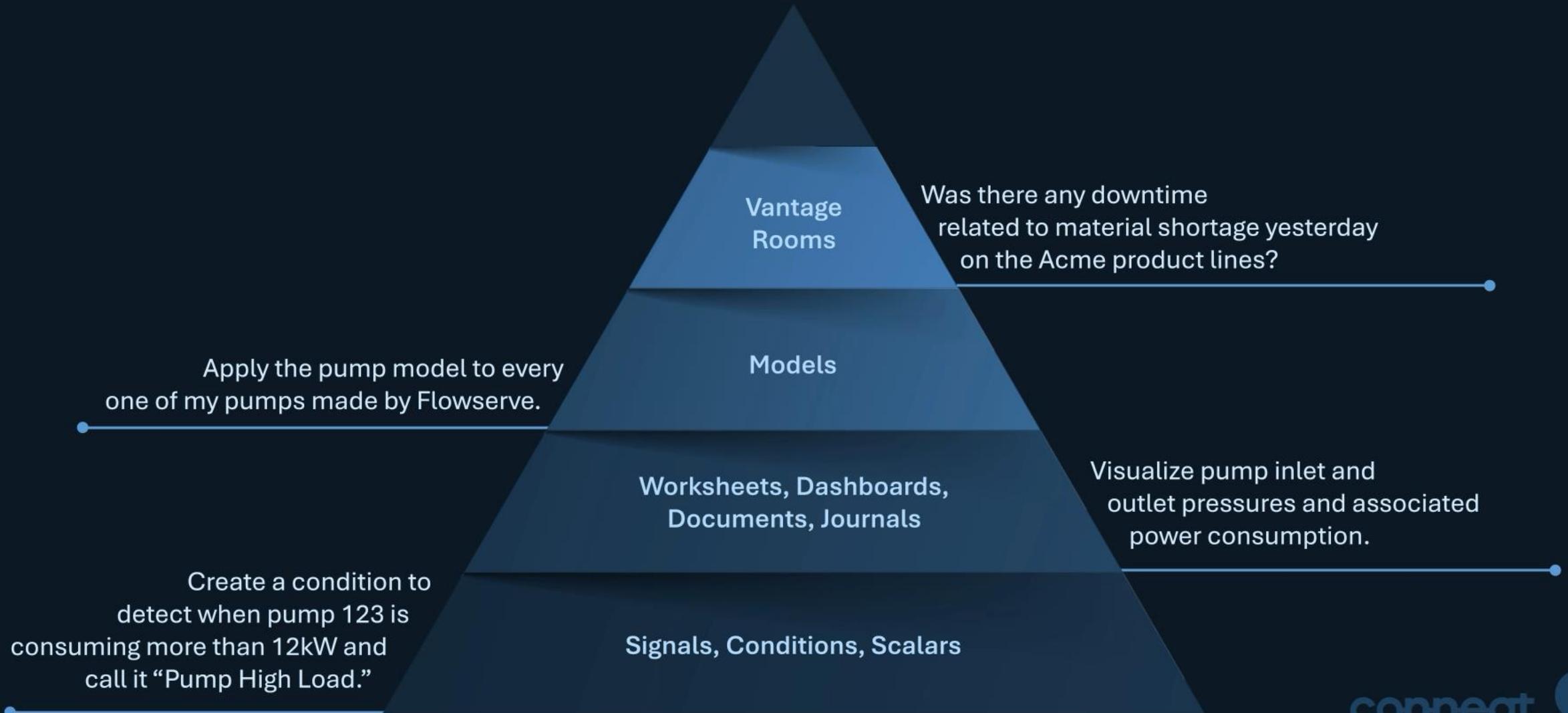
The Insights Pyramid



The Insights Pyramid



The Insights Pyramid



Large Language Models and Seeq



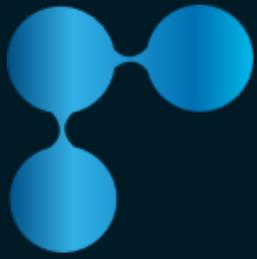
ANTHROPIC



Seeq Virtual Office

February 2025





JOANNA ZINSLI
DIRECTOR, PRODUCT MANAGEMENT



Impact Reports

Premium AI

Analytics Change
Management

No-code
Scaling

Add-on
Updates



Expanded AI Actions

ML Tools

Vantage
Updates

Capabilities



Impact Reports

Premium AI

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Management

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Expanded AI Actions

ML Tools

Vantage
Updates

Capabilities



EXPANDED AI ACTIONS

- Analytics with AI Assistance
 - Document with AI
- Let AI do tedious work

LEAN ON AI SO YOU CAN DO MORE, FASTER



EXPANDED AI ACTIONS

- Analytics with AI Assistance
 - Document with AI
 - Let AI do tedious work

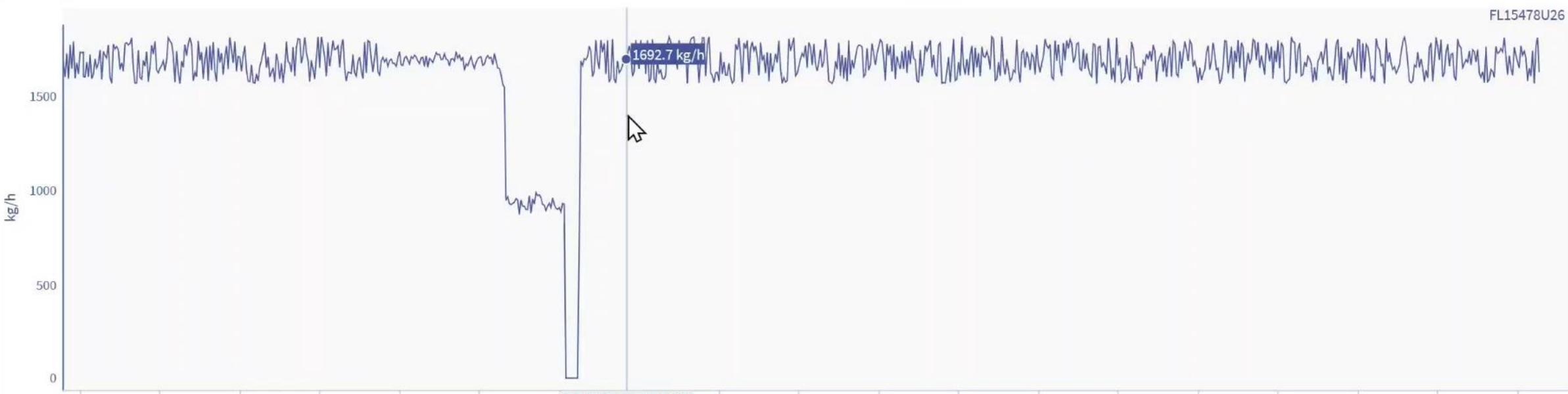
LEAN ON AI SO YOU CAN DO MORE, FASTER



Journal Tools Data Worksheets

Trend

Chart toolbar with icons for Calendar, Chain, Capsule, Compare, One Lane, One Y-Axis, Reset, Labels, Gridlines, Color, Summary, Dimming, Certainty, Zoom, Annotate.



4/14/2025 4:11:14 PM

3/31/2025 1:27 PM EDT 1.2 months 5/8/2025 7:54 AM EDT



Details

Apr 14, 2025 4:11 PM Customize

Name	Asset	Lane	
kg/h FL15478U26	Data	1	1692.7

EXPANDED AI ACTIONS

- Analytics with AI Assistance
 - Document with AI
 - Let AI do tedious work

LEAN ON AI SO YOU CAN DO MORE, FASTER



Trend

Toolbar for Trend view including: Simple, Condition, Chart View, Rows, Columns, Headers, Transpose, Striped, Asset, Group, Expand, Collapse, New Metric, Copy, and Help.

Name	
Group	Sum: Lost Opportunity Cost Avg
> Inventory Management Issues (3)	808353 \$
> Other downtimes (1)	59500 \$

2/6/2025 6:44 PM EST

Timeline navigation: 3.1 months

5/11/2025 7:14 PM EDT

Details

Name	Color	Asset	Lane
kg/h FL15478U26	Blue	Data	3
kg/h Lost Production	Blue	Data	4
kg Totalized Lost Production	Brown	Data	5
\$/kg U26 Market Margin	Gold		6
\$ Lost Opportunity Cost	Blue	Data	7

AI Assistant

AI Assistant controls: Refresh, Settings, Connect, and + New Chat

Explanation

1. Use the **Calculated Items - analyze or calculate items** action to multiply the market margin by totalized lost production for lost opportunity cost.

Attempting to create the following calculation(s): Lost Opportunity Cost with the corresponding formula(s):

```
seeq formula

// Step 1: Multiply U26 Market Margin by Totalized Lost Production
$lost_opportunity_cost = $market_margin * $totalized_lost_production

// Output
return $lost_opportunity_cost
```

Success

Created: 1 items

AI Assistant interaction icons: Speak, Copy, Paste, Help, Like, Dislike, Refresh, and Close.

Instruct me to create items or how to change your display

Actions



EXPANDED AI ACTIONS

- Analytics with AI Assistance
 - Document with AI
- Let AI do tedious work

LEAN ON AI SO YOU CAN DO MORE, FASTER



Journal entries:

- 1. Pie chart: Other Downtime, Count, Inventory Mgmt.
- 2. Line chart: Lost Production
- 3. Table: Inventory Management Issues (3), Other Downtimes (1)

Trend

Trend chart toolbar with various visualization options.

Group	Sum: Lost Opportunity Cost Avg
> Inventory Management Issues (3)	808353 \$
> Other downtimes (1)	59500 \$

2/6/2025 6:44 PM EST | 3.1 months | 5/11/2025 7:14 PM EDT

Details

Name	Color	Asset	Lane
kg/h FL15478U26	Blue	Data	3
kg/h Lost Production	Blue	Data	4
kg Totalized Lost Production	Brown	Data	5
\$/kg U26 Market Margin	Gold		6
\$ Lost Opportunity Cost	Blue	Data	7

AI Assistant

AI Assistant toolbar: Refresh, Settings, Share, + New Chat

Success

Created: 1 items



Document my analysis. Add it to the top of the journal.



Explanation

1. Use the **Journal - create journal entries** action to document the analysis and add it to the top of the journal.

Success

The analysis has been documented with a clear narrative on the production losses and opportunity cost calculations. Two TrendLinks have been embedded—one for the Lost Production calculation and one for the Lost Opportunity Cost calculation. The documentation has been added to the top of your Journal.

Instruct me to create items or how to change your display

Actions



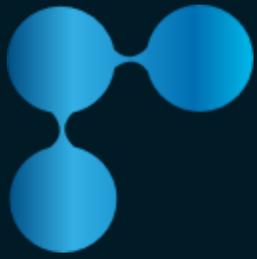
EXPANDED AI ACTIONS

- Analytics with AI Assistance
 - Document with AI
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LEAN ON AI SO YOU CAN DO MORE, FASTER







SHAMUS CUNNINGHAM
HEAD OF CUSTOMER INSIGHTS



IMPACT REPORTS

- Translate analytics into business value
- Capture and promote best practices
- Drive data-informed decision making



ELEVATE YOUR IMPACT FOR REPEATABILITY



IMPACT REPORTS

- Translate analytics into business value
- Capture and promote best practices
- Drive data-informed decision making



ELEVATE YOUR IMPACT FOR REPEATABILITY



+ New

Home

My Folder

Shared

Corporate

Users

Trash

Add-ons

Name Search in current folder

Recently Opened

Pinned

Name	Owner	Creator	Created	Last Updated	
 My Folder Production Analysis	User Name	User Name	5/5/2025 4:46 PM	5/6/2025 8:02 AM	  
 My Folder » Example Use Cases » Predicting Product Properties Use Case Selector: Predicting Product Properties	User Name	User Name	5/7/2025 2:27 PM	5/7/2025 6:25 PM	  
 My Folder F1 Miami Analysis	User Name	User Name	5/5/2025 9:26 PM	5/5/2025 9:26 PM	  
 Corporate » Demo Use Cases SPC Monitoring	User Name	User Name	5/5/2025 1:56 PM	5/5/2025 2:01 PM	  
 Corporate » Demo Use Cases Overall Equipment Effectiveness (OEE)	User Name	User Name	5/5/2025 1:45 PM	5/5/2025 1:48 PM	  
 My Folder » Example Use Cases » Energy Modeling Use Case Selector: Energy Model	User Name	User Name	5/7/2025 2:27 PM	5/7/2025 3:23 PM	  
 My Folder » Example Use Cases » Chromatography Transition Analysis Use Case Selector: Chromatography Transition Analysis	User Name	User Name	5/7/2025 2:33 PM	5/7/2025 2:33 PM	  
 Corporate » Demo Use Cases Batch Cycle Time Optimization	User Name	User Name	5/5/2025 1:11 PM	5/5/2025 1:12 PM	  
 My Folder » Example Use Cases » Detector Exceedance Events Emissions Reporting During Detector Limit Exceedance Events	User Name	User Name	5/7/2025 3:12 PM	5/7/2025 3:12 PM	  
 Corporate » Demo Use Cases Product Campaign Analytics	User Name	User Name	5/5/2025 2:01 PM	5/5/2025 2:02 PM	  

Page: 1 Show: 10 Previous 1 2 Next



IMPACT REPORTS

- Translate analytics into business value
- Capture and promote best practices
- Drive data-informed decision making



ELEVATE YOUR IMPACT FOR REPEATABILITY



Worksheets

- Data**
- Tools**
- Journal**
- Trend**
- Filter tools...
- Overview
- Identify**
Create Conditions to find events and capture periods of interest
- Quantify**
Aggregate your data to calculate key process metrics
- Cleanse**
Clean or filter a signal to prepare it for further analysis
- Model & Predict**
Create analytical models or golden profiles to predict future behavior
- Machine Learning**
Detect anomalies and model behavior using machine learning algorithms
- Import/Export**
Import and export in different formats
- Add-ons**
Add-on tools that integrate with Seeq
- Display**
Create a display based on the current view and add it to an asset tree
- Formula**
Create a signal or condition using simple math and a library of powerful functions
- Calculation Hierarchy



Details

Buttons: All, Axis, Order, Style, Customize

Icon	Name	Color	Values
kg/h	FL15478U26	Blue	
	Inventory Management	Brown	
	Other Downtimes	Green	
kg/h	Lost Production	Purple	
kg	Totalized Lost Production Over Production Issues	Orange	
kg/m³	Quality	Green	

Capsules

Start
Jan 16, 2021 8:44 AM
Feb 2, 2021 4:00 AM
Feb 17, 2021 8:44 AM
Mar 10, 2021 9:44 PM
Apr 5, 2021 10:00 AM
Apr 15, 2021 3:44 PM

Page: 1

IMPACT REPORTS

- Translate analytics into business value
- Capture and promote best practices
- Drive data-informed decision making



ELEVATE YOUR IMPACT FOR REPEATABILITY



IMPACT REPORTS

- Translate analytics into business value
- Capture and promote best practices
- Drive data-informed decision making



ELEVATE YOUR IMPACT FOR REPEATABILITY







NO-CODE SCALING

- AI-assisted search for scalable insights
 - Fallback rules for asset variability
 - Analytics applied at scale
- Multi-level asset contextualization

*FIND & ORGANIZE DATA TO SCALE CALCULATIONS AND
MONITOR TO DRIVE CONTINUOUS IMPROVEMENT*



NO-CODE SCALING

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*FIND & ORGANIZE DATA TO SCALE CALCULATIONS AND
MONITOR TO DRIVE CONTINUOUS IMPROVEMENT*



Worksheets

Data Tools Journal 1 Trend

Name contains...

Exact Match

Reset

Filter and Sort

Search

Asset Groups

Create

Build your own asset group starting from an existing asset tree or manually by searching for signals

Scaling (3)

Create

Scaling Table 1
Seeq Calculations

Scaling Table 2
Seeq Calculations

Building a Tree for Quality and Production data
Seeq Calculations

Recently Accessed (49)

Offspec
Building a Tree for Quality and Production data » APAC » Kintara » U20

Poor quality - exploring
Seeq Calculations

Inventory Issues
Building a Tree for Quality and Production data » APAC » Kintara » U20

Inventory Problems - explore
Seeq Calculations

FL13215U20 (kg/h)
column = FL13215U20; last file imported = prod4.csv
Prod data

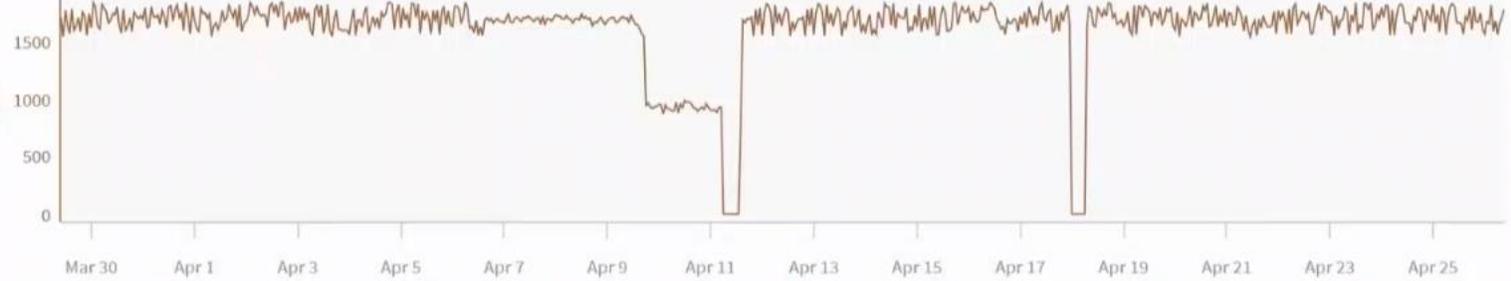
QL13215U20 (kg/m³)
column = QL13215U20; last file imported = qual2.csv



kg/m³



kg/h



3/29/2025 9:11 AM EDT

28 days

4/26/2025 9:11 AM EDT

3/7/2025

2 months

5/7/2025

Details

Capsules

Name	Asset
Poor quality - exploring	Prod data, quali
Inventory Problems - exploring	Prod data
kg/m ³ QL13215U20	quality
kg/h FL13215U20	Prod data

Start
Apr 9, 2025 5:44 PM
Apr 18, 2025 3:00 AM

NO-CODE SCALING

- AI-assisted search for scalable insights
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*FIND & ORGANIZE DATA TO SCALE CALCULATIONS AND
MONITOR TO DRIVE CONTINUOUS IMPROVEMENT*





Scaling Inventor

Edit the search

New column



Delete

Close

Search Items ↑



FL12223U19

FL12226U16

FL12293U22

FL13166U24

FL13215U20

FL13593U5

FL13934U25

FL14644U23

FL14885U12

FL15124U13

FL15216U2

FL15265U21

FL15432U27

FL15478U26

FL15478U26

FL15932U10

FL15996U3

FL16455U18

FL16819U14

FL16853U7

FL17121U4

Columns

Column Actions



+ New Chat



create a scaling table search to find all my flow tags that start with FL1 or VMF

**Explanation**

1. Use the **Scaling Table - add to scaling table** action to search for all flow tags that start with FL1 or VMF.

Success

Here's a search that will find all flow tags that start with 'FL1' or 'VMF'.



Instruct me to create items or how to change your display

Actions ▾



NO-CODE SCALING

- AI-assisted search for scalable insights
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*FIND & ORGANIZE DATA TO SCALE CALCULATIONS AND
MONITOR TO DRIVE CONTINUOUS IMPROVEMENT*



Worksheets

Trend **Scaling Table Builder X**

AI Assistant

Scaling Inventor Edit the search New column Settings Refresh Delete Close

Search Items ↑	Search Items Name	Unit
FL18981U30	FL18981U30	U30
FL19342U6	FL19342U6	U6
FL19391U9	FL19391U9	U9
FL19397U28	FL19397U28	U28
FL19628U1	FL19628U1	U1
FL19915U8	FL19915U8	U8
VMF1241S1L3	VMF1241S1L3	S1L3
VMF1275S2L9	VMF1275S2L9	S2L9
VMF1473S2L4	VMF1473S2L4	S2L4
VMF1649S4L9	VMF1649S4L9	S4L9
VMF1772S2L2	VMF1772S2L2	S2L2
VMF1793S1L7	VMF1793S1L7	S1L7
VMF1879S1L5	VMF1879S1L5	S1L5
VMF1889S1L11	VMF1889S1L11	S1L11
VMF2231S4L13	VMF2231S4L13	S4L13
VMF2255S3L2	VMF2255S3L2	S3L2
VMF2294S1L14	VMF2294S1L14	S1L14
VMF2411S3L12	VMF2411S3L12	S3L12
VMF2414S4L8	VMF2414S4L8	S4L8
VMF2424S2L11	VMF2424S2L11	S2L11

Columns
Column Actions

AI Assistant Settings Share + New Chat

1. Use the **Scaling Table - add to scaling table** action to search for all flow tags that start with FL1 or VMF.

Success

Here's a search that will find all flow tags that start with 'FL1' or 'VMF'.

Now make a new column called Unit that extracts the Unit value from that column - the value U(any #s)

Explanation

1. Use the **Scaling Table - create columns** action to add a new column called Unit that extracts the Unit value from the column with the pattern U(any #s).

Success

Create a new column called 'Unit' that extracts the unit value from the 'Search Items Name' column, specifically the pattern 'U' followed by any numbers.

Instruct me to create items or how to change your display

Actions



NO-CODE SCALING

- AI-assisted search for scalable insights
 - Fallback rules for asset variability
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 - Multi-level asset contextualization

*FIND & ORGANIZE DATA TO SCALE CALCULATIONS AND
MONITOR TO DRIVE CONTINUOUS IMPROVEMENT*





Search Items ↑	Search for Quality Tags	Unit
FL12223U19	QL12223U19	U19
FL12226U16	QL12226U16	U16
FL12293U22	QL12293U22	U22
FL13166U24	QL13166U24	U24
FL13215U20	QL13215U20	U20
FL13593U5	QL13593U5	U5
FL13934U25	QL13934U25	U25
FL14644U23	QL14644U23	U23
FL14885U12	QL14885U12	U12
FL15124U13	QL15124U13	U13
FL15216U2	QL15216U2	U2
FL15265U21	QL15265U21	U21
FL15432U27	QL15432U27	U27
FL15478U26	QL15478U26 X	U26
FL15932U10	QL15932U10	U10
FL15996U3	QL15996U3	U3
FL16455U18	QL16455U18	U18
FL16819U14	QL16819U14	U14
FL16853U7	QL16853U7	U7
FL17121U4	QL17121U4	U4
FL17319U11	QL17319U11	U11

NO-CODE SCALING

- AI-assisted search for scalable insights
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*FIND & ORGANIZE DATA TO SCALE CALCULATIONS AND
MONITOR TO DRIVE CONTINUOUS IMPROVEMENT*



Worksheets

Data Tools Journal Trend Scaling Table Builder X

Name contains...

Exact Match

Reset [Filter and Sort](#)

Pinned (1)

Building a Tree for Quality and Production data

Seeq Table Items: Building a Tree for Quality and Production data

Asset Groups

Build your own asset group starting from an existing asset tree or manually by searching for signals

Scaling (4)

- Scaling Table 1 Seeq Calculations
- Scaling Table 2 Seeq Calculations
- Building a Tree for Quality and Production data Seeq Calculations
- Scaling Inventory Issues and Offspec Events Seeq Calculations

Recently Accessed (45)

- Offspec Building a Tree for Quality and Production data » NA » Iro nvale » S2L1
- Inventory Issues Building a Tree for Quality and Production data » NA » Iro nvale » S2L1

Scaling Inventory Issu Edit the search New column

Search Items ↑	Search for Quality Tags	Unit	Inventory Issues	Offspec	Unit (Asset)
FL12223U19	QL12223U19	U19	Inventory Issues	Offspec	U19
FL12226U16	QL12226U16	U16	Inventory Issues	Offspec	U16
FL12293U22	QL12293U22	U22	Inventory Issues	Offspec	U22
FL13166U24	QL13166U24	U24	Inventory Issues	Offspec	U24
FL13215U20	QL13215U20	U20	Inventory Issues	Offspec	U20
FL13593U5	QL13593U5	U5	Inventory Issues	Offspec	U5
FL13934U25	QL13934U25	U25	Inventory Issues	Offspec	U25
FL14644U23	QL14644U23	U23	Inventory Issues	Offspec	U23
FL14885U12	QL14885U12	U12	Inventory Issues	Offspec	U12
FL15124U13	QL15124U13	U13	Inventory Issues	Offspec	U13
FL15216U2	QL15216U2	U2	Inventory Issues	Offspec	U2
FL15265U21	QL15265U21	U21	Inventory Issues	Offspec	U21
FL15432U27	QL15432U27	U27	Inventory Issues	Offspec	U27

Details

Apr 26, 2025 12:27 AM Customize

Name Asset

NO-CODE SCALING

- AI-assisted search for scalable insights
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*FIND & ORGANIZE DATA TO SCALE CALCULATIONS AND
MONITOR TO DRIVE CONTINUOUS IMPROVEMENT*



VANTAGE UPDATES

- Vantage Rooms: Self-service setup
- Organize events for triage and collaboration
- Capture expert knowledge during monitoring workflows

FLEXIBLE WORKFLOWS TO MONITOR ACROSS YOUR ENTERPRISE



VANTAGE UPDATES

- Vantage Rooms: Self-service setup
- Organize events for triage and collaboration
- Capture expert knowledge during monitoring workflows

FLEXIBLE WORKFLOWS TO MONITOR ACROSS YOUR ENTERPRISE



+ New

Home

My Folder

Shared

Corporate

Users

Trash

Add-ons

Company Links

Name

Search in current folder

Recently Opened

Pinned

Name	Owner	Creator	Created	Last Updated	
 My Folder » Conneqt 2025 - Product Demos Enterprise Analysis of Production & Quality Issues	Corporate Engineer	Corporate Engineer	5/5/2025 1:39 PM	5/5/2025 1:39 PM	  
 My Folder Conneqt 2025 - Product Demos	Corporate Engineer	Corporate Engineer	5/5/2025 1:39 PM	5/5/2025 1:39 PM	  
 Users » Joanna Zinsli Production Analysis	User Name	User Name	4/25/2025 6:57 PM	5/10/2025 11:25 AM	  
 My Folder Vantage Demo Jan 22 2025	Corporate Engineer	Corporate Engineer	1/19/2025 12:52 PM	2/4/2025 6:22 PM	  
 My Folder Operating Window Monitoring	Corporate Engineer	Corporate Engineer	10/18/2024 3:48 PM	3/12/2025 11:59 AM	  

Page:

1

Show:

5

Previous

1

2

3

...

7

8

Next

VANTAGE UPDATES

- Vantage Rooms: Self-service setup
- Organize events for triage and collaboration
- Capture expert knowledge during monitoring workflows

FLEXIBLE WORKFLOWS TO MONITOR ACROSS YOUR ENTERPRISE



Settings

Evidence

Inventory Issues by Site

4/1/2025 8:49 AM EDT - 4/26/2025 8:49 AM EDT

QuickTrend

Site X

Filter table...

Site	Start	End	Flagged	Labels	Review
> Caldrieth (1)	Apr 24, 2025, 8:44 PM	Apr 26, 2025, 12:00 PM			
> Ironvale (13)	Apr 7, 2025, 4:46 AM	Apr 26, 2025, 12:00 PM			
> Forgehaven (12)	Apr 4, 2025, 10:44 AM	Apr 26, 2025, 12:00 PM			
> Velmark (6)	Apr 3, 2025, 2:44 AM	Apr 25, 2025, 9:00 AM			
> Harborstone (14)	Apr 14, 2025, 12:44 AM	Apr 25, 2025, 9:00 AM			
> Westmoor (13)	Apr 3, 2025, 2:44 AM	Apr 25, 2025, 9:00 AM			
> Kintara (9)	Apr 4, 2025, 10:44 AM	Apr 24, 2025, 10:00 AM			
> Stravon (4)	Apr 6, 2025, 4:44 AM	Apr 19, 2025, 7:00 AM			
> Mirelan (2)	Apr 4, 2025, 10:44 AM	Apr 18, 2025, 9:00 PM			
> Millcrest (10)	Apr 6, 2025, 4:44 AM	Apr 14, 2025, 2:00 PM			
> Veltrin (1)	Apr 12, 2025, 2:44 PM	Apr 14, 2025, 10:00 AM			
> Bravora (1)	Apr 11, 2025, 7:44 AM	Apr 13, 2025, 3:00 AM			
> Carrick (1)	Apr 11, 2025, 5:44 AM	Apr 13, 2025, 1:00 AM			
> Norham (1)	Apr 7, 2025, 5:44 AM	Apr 9, 2025, 1:00 AM			
> Lembak (1)	Apr 6, 2025, 4:44 AM	Apr 8, 2025, 12:00 AM			

Context

Currently selected: 1 Site

History

Search context

The selected items have no context.

Flag Review Label Suppress Reason codes

Enter a note by typing here...

Submit

VANTAGE UPDATES

- Vantage Rooms: Self-service setup
- Organize events for triage and collaboration
- Capture expert knowledge during monitoring workflows

FLEXIBLE WORKFLOWS TO MONITOR ACROSS YOUR ENTERPRISE



Settings

Evidence

Ironvale and Kintara Offspec



4/1/2025 8:49 AM EDT - 4/26/2025 8:49 AM EDT

QuickTrend

Site X

Filter table...

Reason code 1	Reason code 2	Site	Condition	Sta
		(2) Kintara,Ironvale	(1) Offspec	
		> Ironvale (4)	*multiple values*	
		> Kintara (3)	*multiple values*	

Context

Currently selected: 1 Capsule

History

- Flag
- Review
- Label
- Suppress
- Reason codes

Enter a note by typing here...

Submit

VANTAGE UPDATES

- Vantage Rooms: self-service setup
- Organize events for triage and collaboration
- Capture expert knowledge during monitoring workflows

FLEXIBLE WORKFLOWS TO MONITOR ACROSS YOUR ENTERPRISE



PREMIUM AI

- Reason and perform multi-step analytics
- Respond with text and interactive visuals
- Access external documentation or knowledge in Seeq

ACCELERATE DISCOVERY AND SCALE EXPERTISE



PREMIUM AI

- Reason and perform multi-step analytics
- Respond with text and interactive visuals
- Access external documentation or knowledge in Seeq

ACCELERATE DISCOVERY AND SCALE EXPERTISE



Settings
Context

Evidence Conditions

Inventory Issues by Site 

4/1/2025 5:49 AM PDT - 4/26/2025 5:49 AM PDT 

 QuickTrend

Site X

Reviewed	Site	Start	End	Flagged	Labels	Duration
✓	> Caldrieth (1)	Apr 24, 2025, 5:44 PM	Apr 26, 2025, 9:00 AM			
	> Harborstone (14)	Apr 13, 2025, 9:44 PM	Apr 25, 2025, 6:00 AM			
✓	> Veltrin (1)	Apr 12, 2025, 11:44 AM	Apr 14, 2025, 7:00 AM			
✓	> Bravora (1)	Apr 11, 2025, 4:44 AM	Apr 13, 2025, 12:00 AM			
	> Carrick (1)	Apr 11, 2025, 2:44 AM	Apr 12, 2025, 10:00 PM			
	> Norham (1)	Apr 7, 2025, 2:44 AM	Apr 8, 2025, 10:00 PM			
	> Ironvale (13)	Apr 7, 2025, 1:46 AM	Apr 26, 2025, 9:00 AM			
	> Stravon (4)	Apr 6, 2025, 1:44 AM	Apr 19, 2025, 4:00 AM			
	> Lembak (1)	Apr 6, 2025, 1:44 AM	Apr 7, 2025, 9:00 PM			
	> Millcrest (10)	Apr 6, 2025, 1:44 AM	Apr 14, 2025, 11:00 AM			
	> Kintara (9)	Apr 4, 2025, 7:44 AM	Apr 24, 2025, 7:00 AM			

PREMIUM AI

- Reason and perform multi-step analytics
- Respond with text and interactive visuals
- Access external documentation or knowledge in Seeq

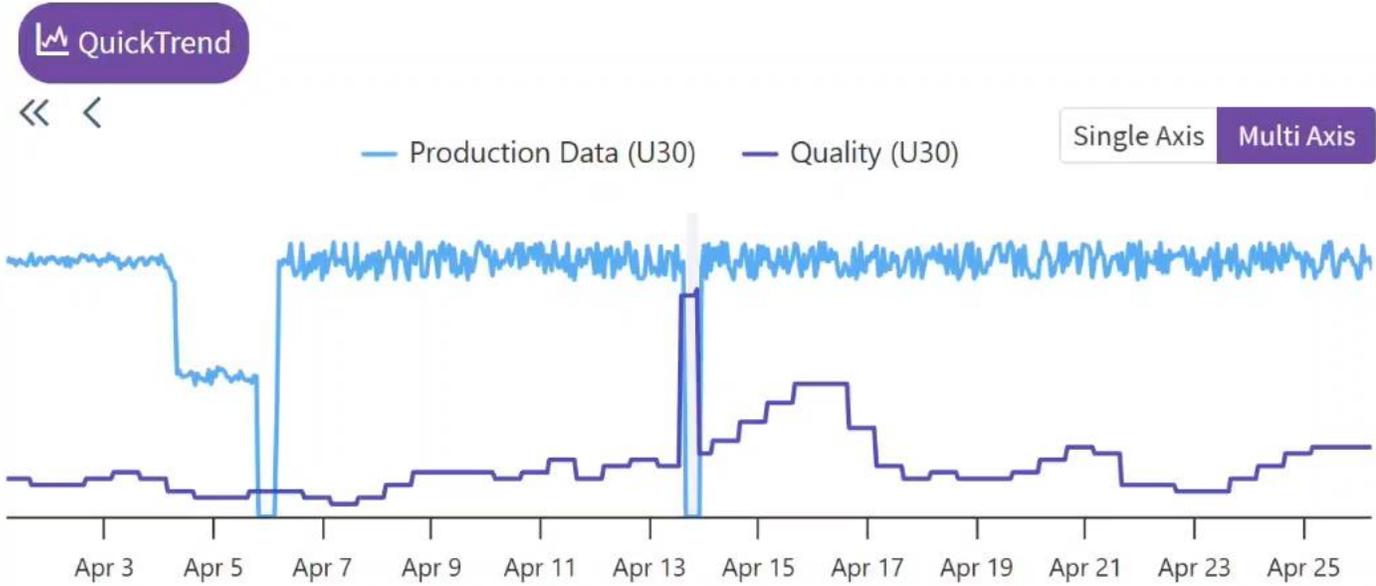
ACCELERATE DISCOVERY AND SCALE EXPERTISE



Settings
Context

Evidence Conditions

All Offspec Events by Site 4/1/2025 5:49 AM PDT - 4/26/2025 5:49 AM PDT



Site X Filter table...

Reason code 1	Reason code 2	Site	Condition
multiple values	*multiple values*	▼ Mirelan (1)	*multiple
multiple values	*multiple values*	> Kintara (3)	*multiple
multiple values	*multiple values*	> Millcrest (5)	*multiple

AI Assistant

+ New Chat

General Agent

Follow up with more question or info to refine my answers.

Agent Q

I can help you gather insights about your operations

TQme

I can answer questions using your company documentation

Ask me anything about Seeq or industrial analytics

General

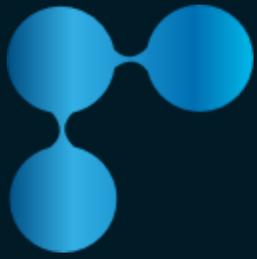
PREMIUM AI

- Reason and perform multi-step analytics
- Respond with text and interactive visuals
- Access external documentation or knowledge in Seeq

ACCELERATE DISCOVERY AND SCALE EXPERTISE







JOHN GARRAMONE
PRODUCT MANAGER



MACHINE LEARNING (ML)

- Predicting with Partial Least Squares
 - Refining the Data
- Detecting Deviations with Traditional and Machine Learning Methods

MAKING HYBRID ANALYTICS SIMPLE



MACHINE LEARNING (ML)

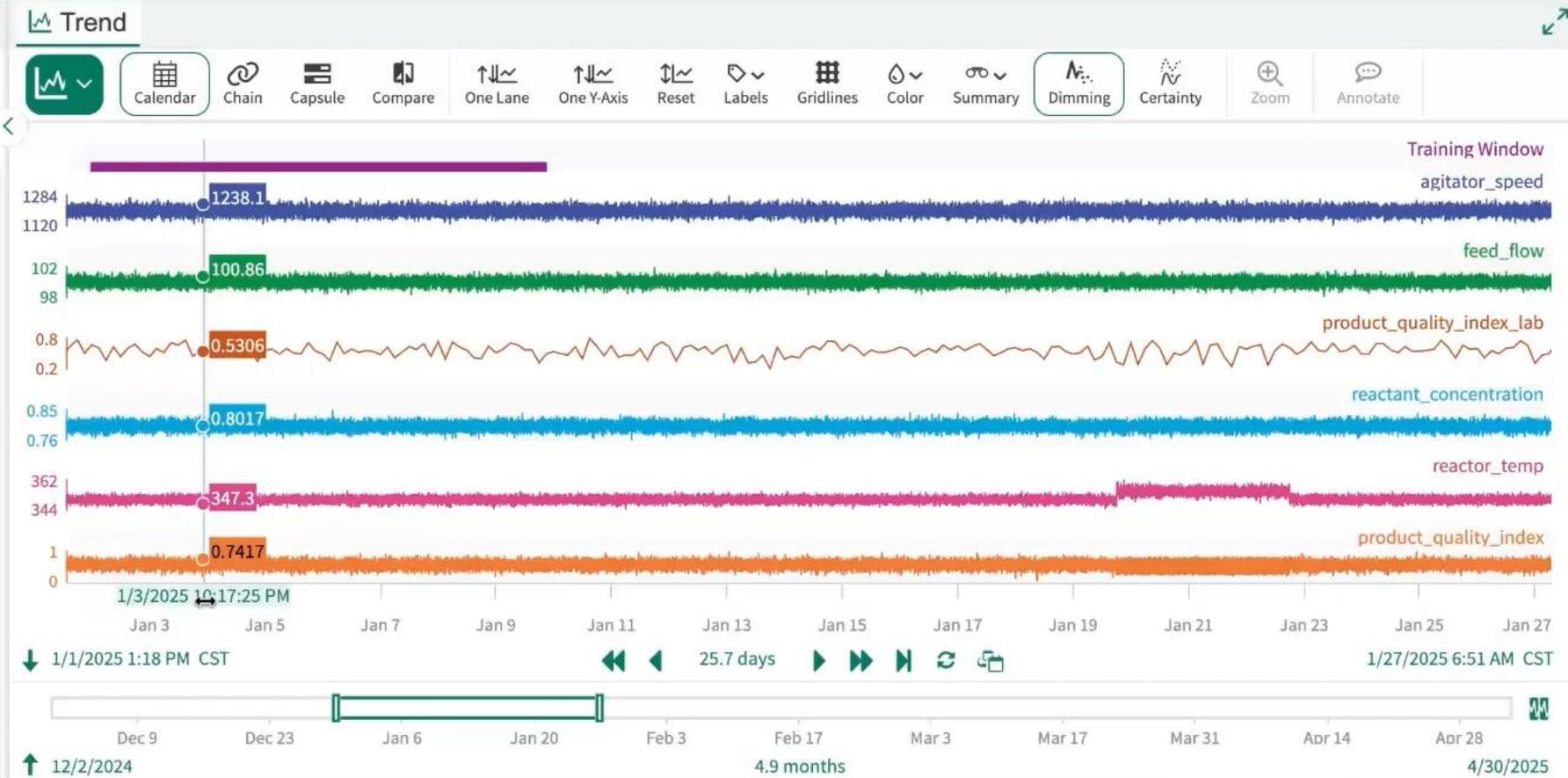
- Predicting with Partial Least Squares
 - Refining the Data
- Detecting Deviations with Traditional and Machine Learning Methods

MAKING HYBRID ANALYTICS SIMPLE



Worksheets
Journal

- Data** **Tools**
- Filter tools...
- Overview
- Identify**
Create Conditions to find events and capture periods of interest
- Quantify**
Aggregate your data to calculate key process metrics
- Cleanse**
Clean or filter a signal to prepare it for further analysis
- Model & Predict**
Create analytical models or golden profiles to predict future behavior
- Machine Learning**
Detect anomalies and model behavior using machine learning algorithms
- Import/Export**
Import and export in different formats
- Add-ons**
Add-on tools that integrate with Seeq
- Calculation Hierarchy



Details

Jan 3, 2025 10:17 PM Customize

Name	Asset	Lane	StdDev
Training Window		1	
agitator_speed	pls demo dataset with reactor temp anomaly	2	16.333
feed_flow	pls demo dataset with reactor temp anomaly	3	0.408
product quality index lab	pls demo dataset with reactor temp anomaly	4	0.0992

Capsules

Start	Duration
Jan 1, 2025 11:28 PM	07d 21:44:08.

Page: 1

MACHINE LEARNING (ML)

- Predicting with Partial Least Squares
 - Refining the Data
- Detecting Deviations with Traditional and Machine Learning Methods

MAKING HYBRID ANALYTICS SIMPLE

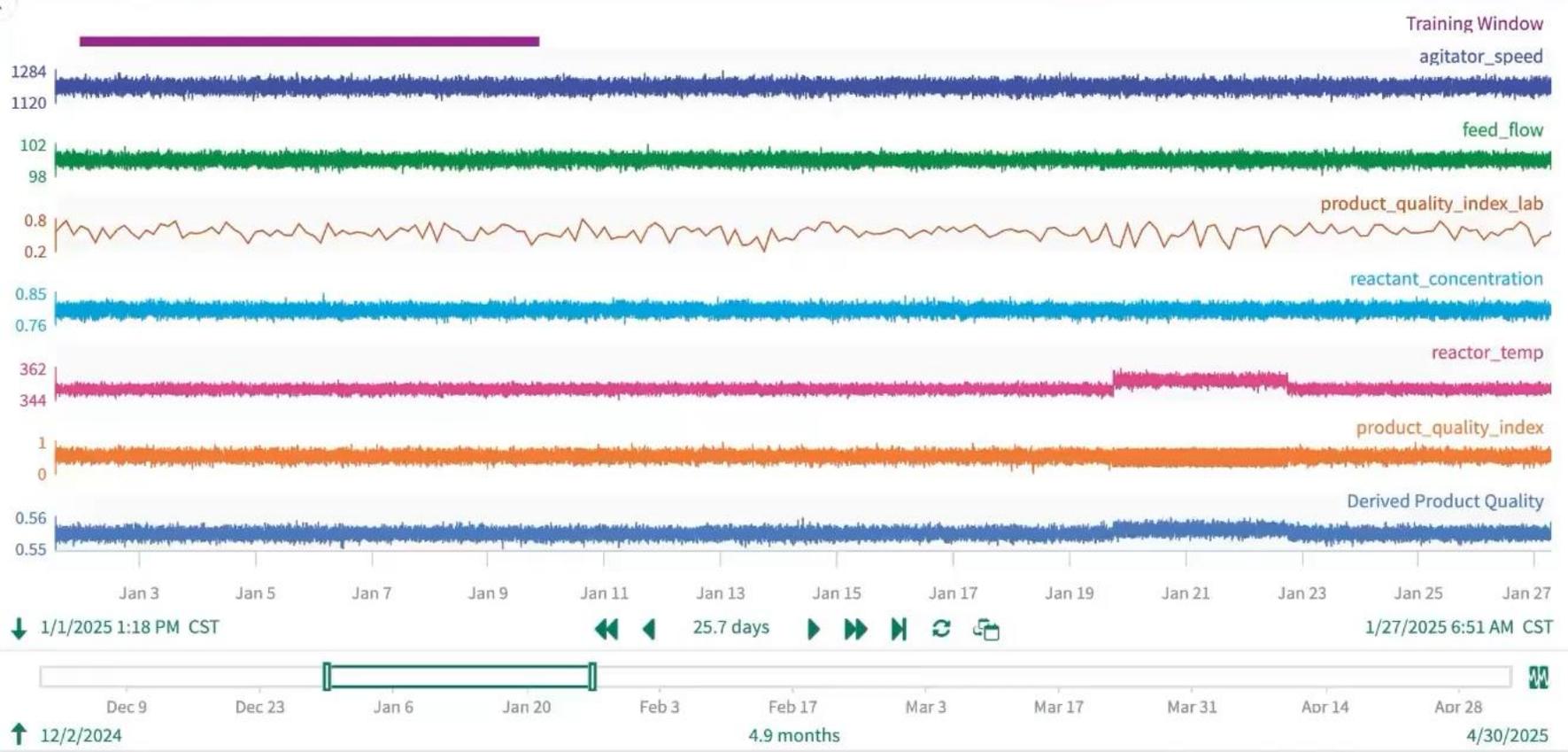


Worksheets
Journal

- Data** **Tools**
- Filter tools...
- Overview**
Aggregate your data to calculate key process metrics
- Cleanse**
Clean or filter a signal to prepare it for further analysis
- Model & Predict**
Create analytical models or golden profiles to predict future behavior
- Machine Learning**
Detect anomalies and model behavior using machine learning algorithms
- Import/Export**
Import and export in different formats
- Add-ons**
Add-on tools that integrate with Seeq
- Display**
Create a display based on the current view and add it to an asset tree
- Formula**
- Calculation Hierarchy

Trend

[Icons: Calendar, Chain, Capsule, Compare, One Lane, One Y-Axis, Reset, Labels, Gridlines, Color, Summary, Dimming, Certainty, Zoom, Annotate]



Details

Name	Asset	Lane	StdDev
Derived Product Quality	pls_demo_dataset_with_reactor_temp_anomaly	8	0.0017

Page: 1

Capsules

[Icons: Start, Duration]

MACHINE LEARNING (ML)

- Predicting with Partial Least Squares
 - Refining the Data
- Detecting Deviations with Traditional and Machine Learning Methods

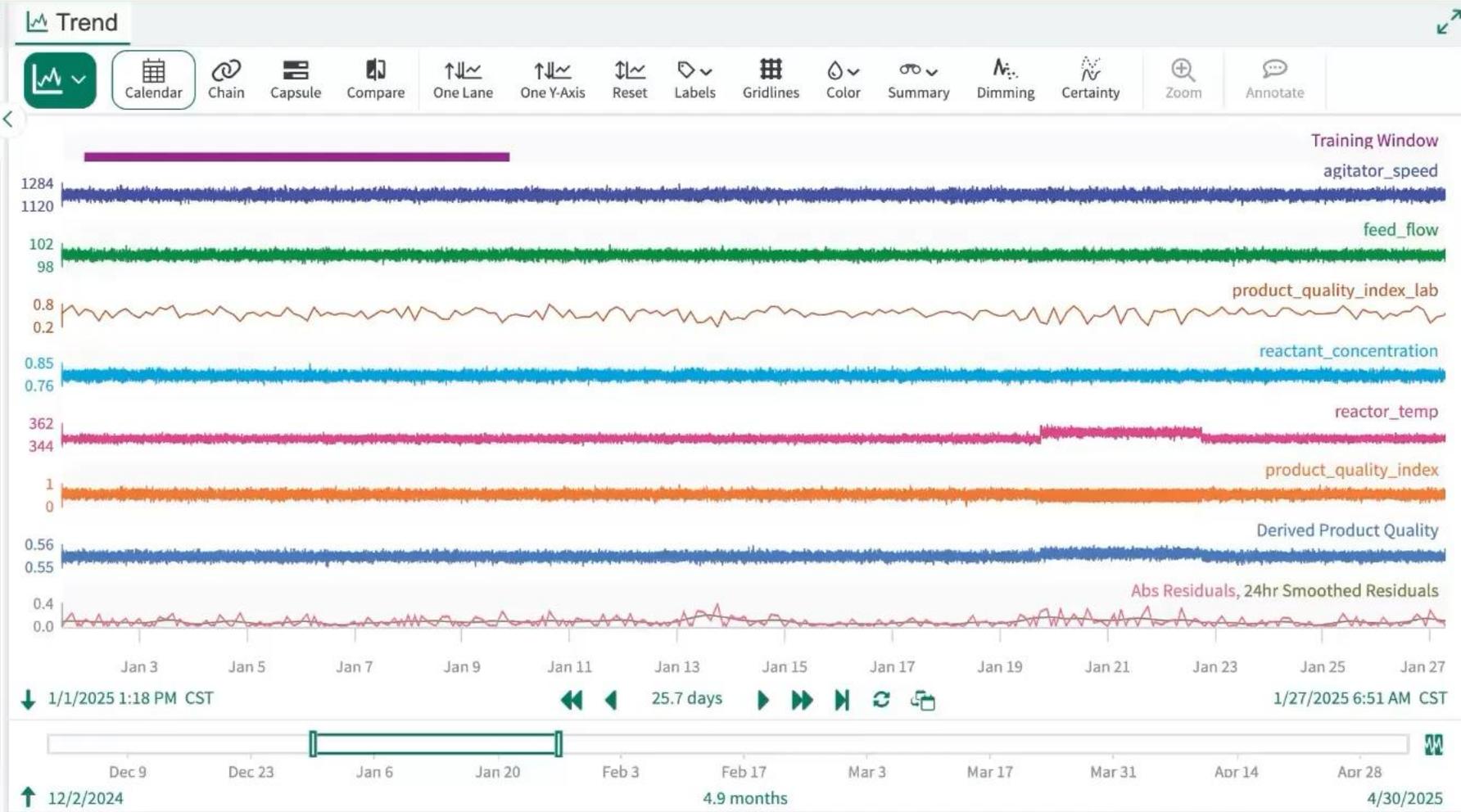
MAKING HYBRID ANALYTICS SIMPLE



Data **Tools**

Filter tools...

- Overview
- Identify
Create Conditions to find events and capture periods of interest
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Import and export in different formats
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Add-on tools that integrate with Seeq
- Calculation Hierarchy



Details **Capsules**

Customize

Name	Asset	Lane	StdDev	Start	Duration
Abs Residuals	pls_demo_dataset_with_reactor_temp_anomaly	9	0.0622		
24hr Smoothed Residuals	pls_demo_dataset_with_reactor_temp_anomaly	9	0.0306		

Page: 1

MACHINE LEARNING (ML)

- Predicting with Partial Least Squares
 - Refining the Data
- Detecting Deviations with Traditional and Machine Learning Methods

MAKING HYBRID ANALYTICS SIMPLE



DATA LAB & ADD-ON UPDATES

- Python 3.11
- New General Availability Add-ons
 - Parallel Coordinates
 - Plot Digitizer

IMPROVING THE ADD-ON ECOSYSTEM



PYTHON 3.11 UPDATE



- Python 3.11 is here!
- Python 3.8 is no longer receiving security updates by the Python Organization.
- Data Lab Environment Manager is available to help with transition

Data Lab Environment Manager

This tool helps Data Lab users transition their Notebooks between different Python versions, manage projects, and handle Python packages effectively.

For detailed instructions, please refer to the full documentation.

This project has been verified to work with Python 3.11.
[Remove Verification](#)
Verified by: John Garramone
Verified on: 2025-05-07 14:55:14

Navigation: Notebooks Overview | **Projects Overview** | Packages | Console Output

Filters: Last Used: Last 6 Months | Scheduled Notebook: All | Project Type: All | Sort By: Last Updated | Local Packages (Python): All | Python 3.11 Verified: False

	Project Name	ID	Owner Name	Creator Name	Project Type	Last Updated	Scheduled Notebooks	Local Packages (Python)	Python 3.11 Verified
1	lib office pdf convert sdl	0F02C8C0-90FA-E830-999C-1AB4BDC2DD62	James Higgie	James Higgie	Data Lab	2025-05-09 02:26:51	None	3.11	False
2	seeq_genai	0EFD3675-EF6F-75B0-A2C7-06273CCC27DF	Andres Barbaro	Andres Barbaro	Data Lab Functions	2025-05-08 22:51:28	None	3.11	False
3	Project May 8, 2025 6:33 PM	0F02C5C8-0829-6420-9F38-59594EBAAD37	John Brezovec	John Brezovec	Data Lab	2025-05-08 17:41:59	None		False
4	com.seeq.addon.seeq_ml.create	0EFFDFE9-191B-62A0-8240-08E922B6E6F3	Ayobami Ojekunle	Ayobami Ojekunle	Data Lab Packaged Add-On	2025-05-08 14:39:41	Active	3.11, 3.8	False
5	com.seeq.addon.seeq_ml.backend	0EFFDFEB-CEA5-E8D0-88C4-0DB437F81B9B	Ayobami Ojekunle	Ayobami Ojekunle	Data Lab Functions	2025-05-08 13:34:37	None	3.8	False

Need Help? Ask our Assistant “Help me upgrade to Python 3.11”



DATA LAB & ADD-ON UPDATES

- Python 3.11
- New General Availability Add-ons
 - Parallel Coordinates
 - Plot Digitizer

IMPROVING THE ADD-ON ECOSYSTEM



Worksheets



Product Quality



Plot Digitizer



Parallel Coordinates

Data

Tools

Journal

Trend

Name contains...

Exact Match

Reset

Filter and Sort

Search

Example » Cooling Tower 1 » Area B

Select All

Compressor Power (kW)

Compressor Stage

Optimizer

Relative Humidity (%)

Temperature (°F)

Wet Bulb (°F)



Sampling

Samples Aligned To:
Compressor Power



Color



Filter



Dimming



Reset Order



Show Time



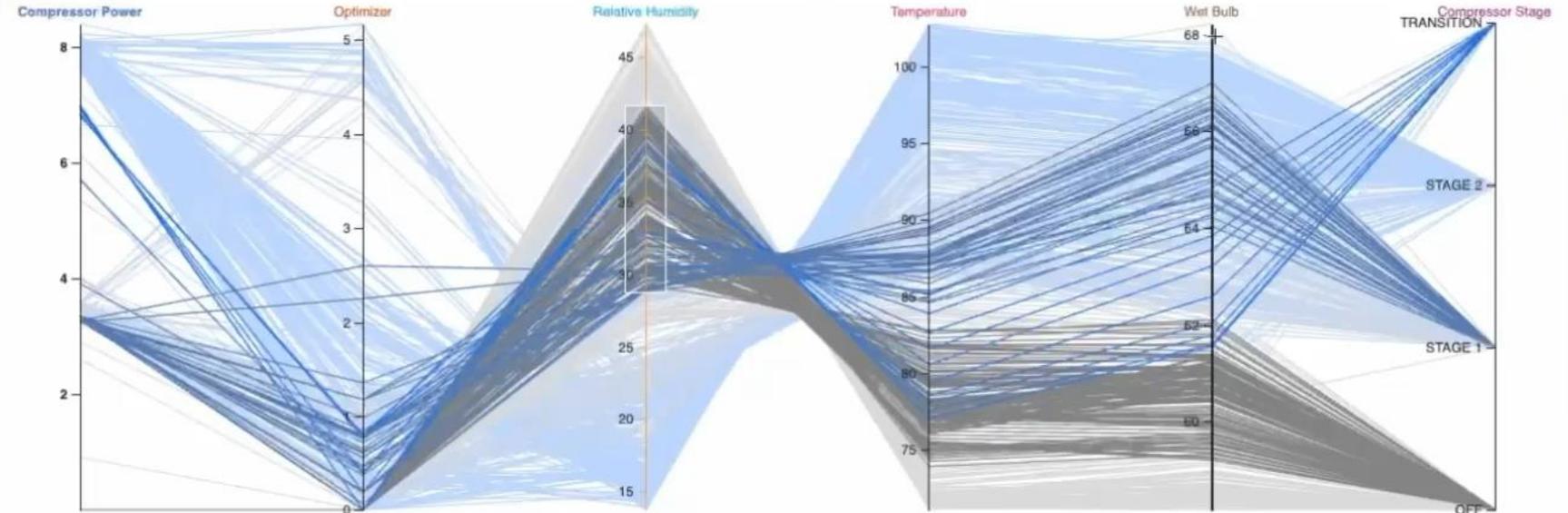
Brushes



Boundaries



Create



5/6/2025 2:58 PM CDT



1 day



5/7/2025 2:58 PM CDT



4/30/2025



7 days

5/7/2025

Details

Name	Color	Asset
kW Compressor Power	Blue	Area B
Compressor Stage	Purple	Area B
Optimizer	Orange	Area B
% Relative Humidity	Light Blue	Area B
°F Temperature	Pink	Area B
°F Wet Bulb	Brown	Area B

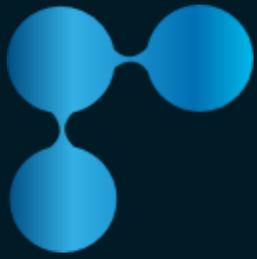
DATA LAB & ADD-ON UPDATES

- Python 3.11
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IMPROVING THE ADD-ON ECOSYSTEM





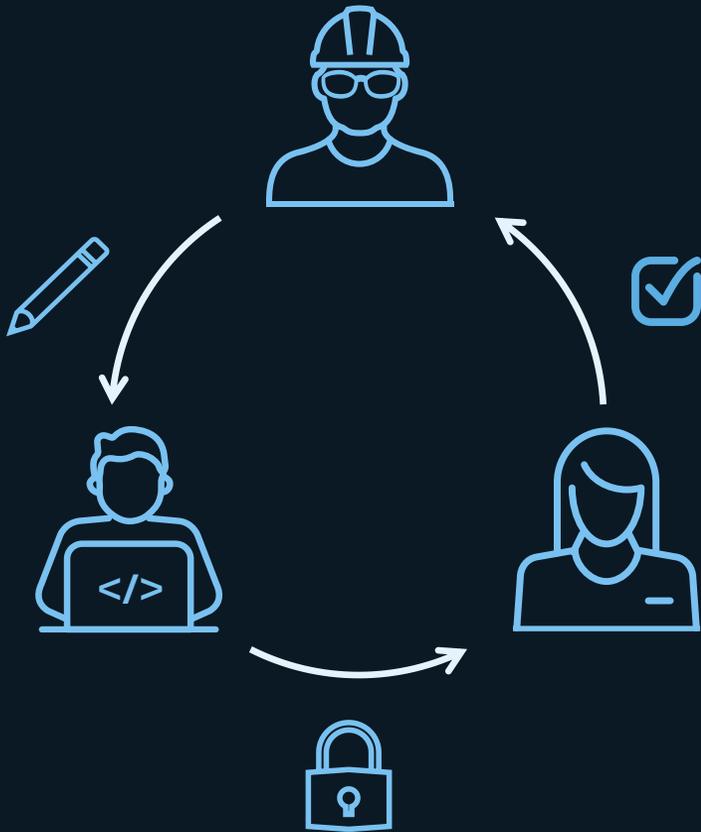


MICHELLE HART
PRODUCT MANAGER



ANALYTICS CHANGE MANAGEMENT

- Locking & Versioning of Workbench



ANALYTICS YOU CAN TRUST



Worksheets

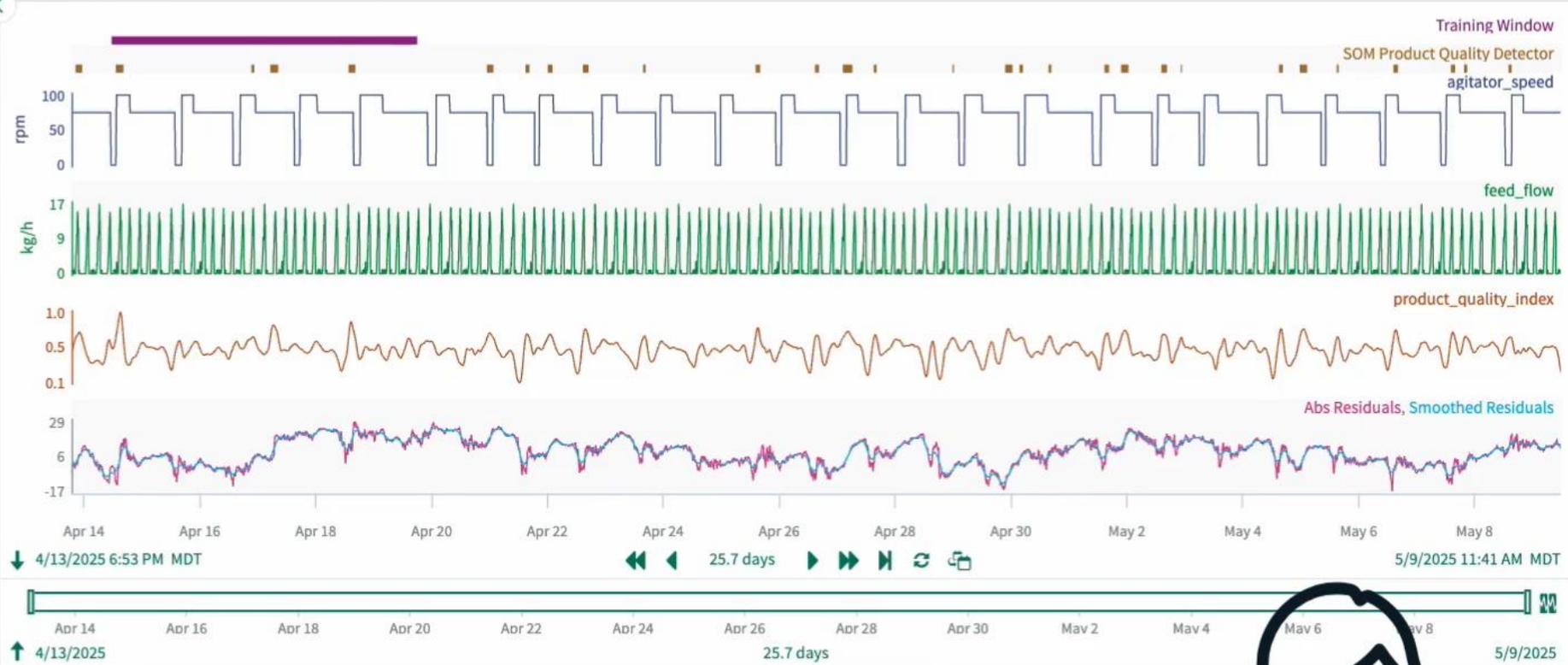
- Data
- Tools
- Journal

Editing ✦ Saved

Paragraph

Trend

Calendar Chain Capsule Compare One Lane One Y-Axis Reset Labels Gridlines Color Summary Dimming Certainty Zoom Annotate



Details

Name	Asset	Lane
Training Window		1
SOM Product Quality Detector	Area A, Area B	2
rpm agitator_speed	Reactor 1	3
kg/h feed_flow		4
product_quality_index	Area A, Area B	5
Abs Residuals	Area A, Area B	6
Smoothed Residuals	Area A, Area B	6

Capsules

Start
Apr 13, 2025 8:29 PM
Apr 14, 2025 11:26 AM
Apr 14, 2025 1:10 PM
Apr 16, 2025 9:26 PM
Apr 17, 2025 5:09 AM
Apr 18, 2025 1:33 PM

Page: 1

[All signals](#)

In this demo, we're using Partial Least Squares regression to model and understand what drives product quality in a process.

We have four key input signals: feed flow, reactor temperature, agitator speed, and reactant concentration. These are our predictors.

Our output signal is the Product Quality Detector, and we want to see how much of it we can explain using the inputs.

By applying PLS, we can uncover:

- The relative importance of each input signal
- How much variance in product quality can be captured by these inputs
- Insights into underlying process behavior for optimization and troubleshooting.

We will identify 2 issues - a subtle issue with reactant concentration and an issue with the reactor temperature which could signal an issue with a heat exchanger.

Analysis Documentation

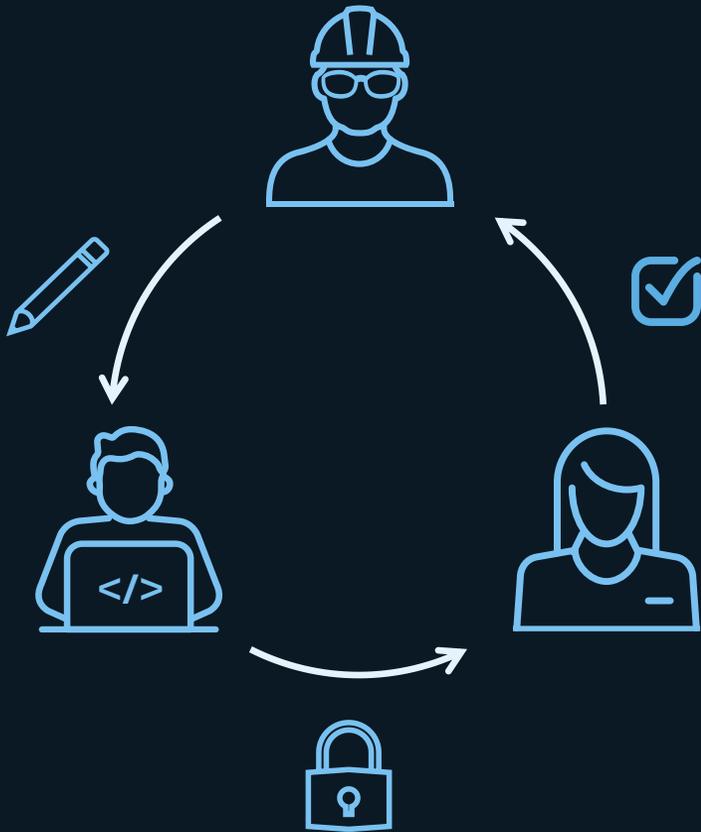
This analysis evaluates the prediction deviation by following a sequential calculation hierarchy starting from the sensor data used in the product quality detector, and proceeding through the residual computations, smoothing, and ultimately the derivation of the prediction deviation condition. Each step is represented by a trend link that captures both the inputs and outputs involved in that stage.

Comments > 0



ANALYTICS CHANGE MANAGEMENT

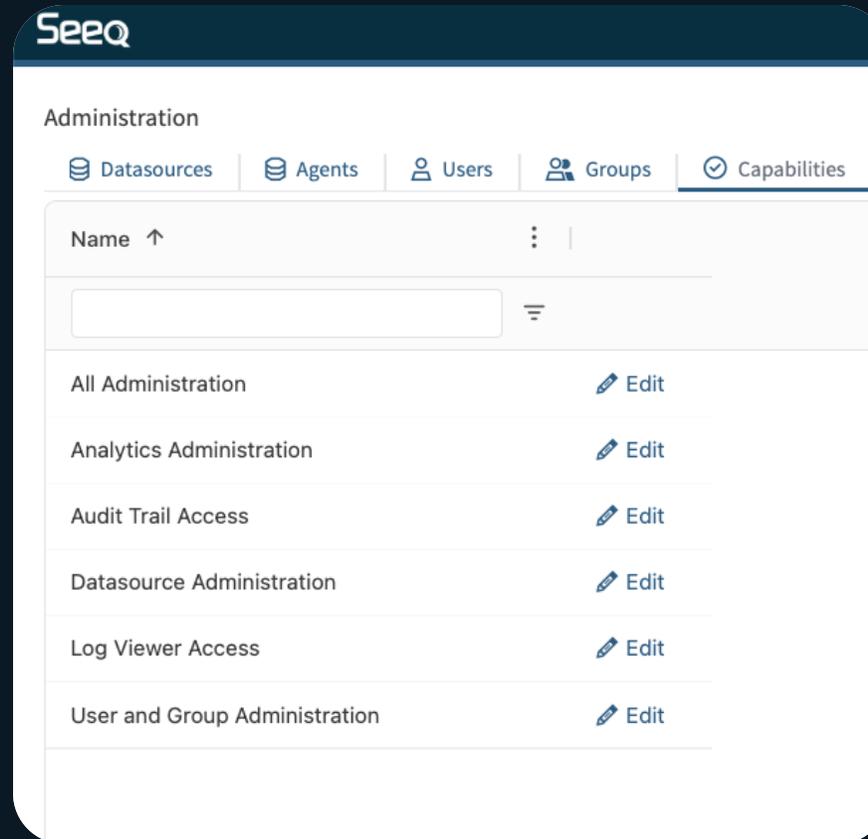
- Locking & Versioning of Workbench



ANALYTICS YOU CAN TRUST



CAPABILITIES



EACH PERSON HAS ONLY THE CAPABILITIES NEEDED FOR THEIR ROLE





Impact Reports

Premium AI

Analytics Change
Management

No-code
Scaling

Add-on
Updates



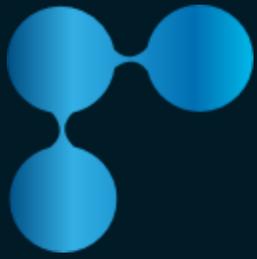
Expanded AI Actions

ML Tools

Vantage
Updates

Capabilities





DUSTIN JOHNSON
CHIEF TECHNOLOGY OFFICER



MATT DENTON
PRODUCT MANAGER DAV

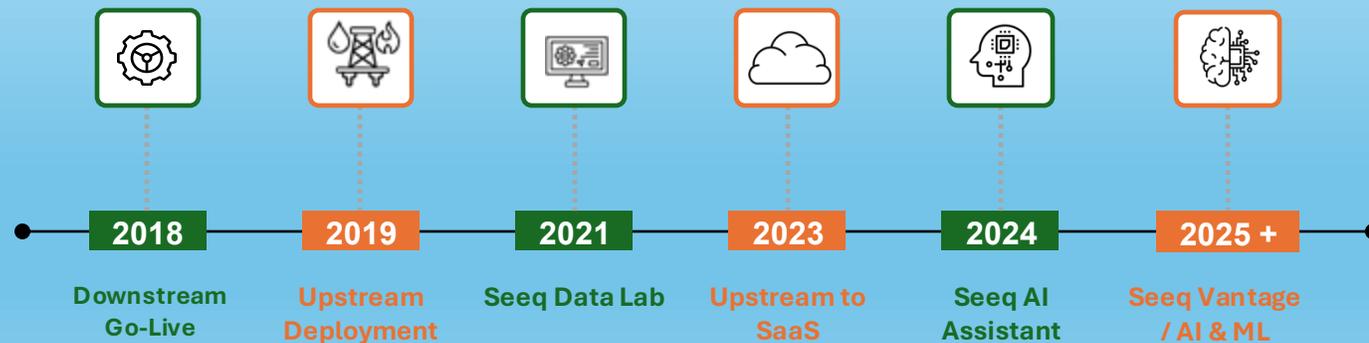
ExxonMobil



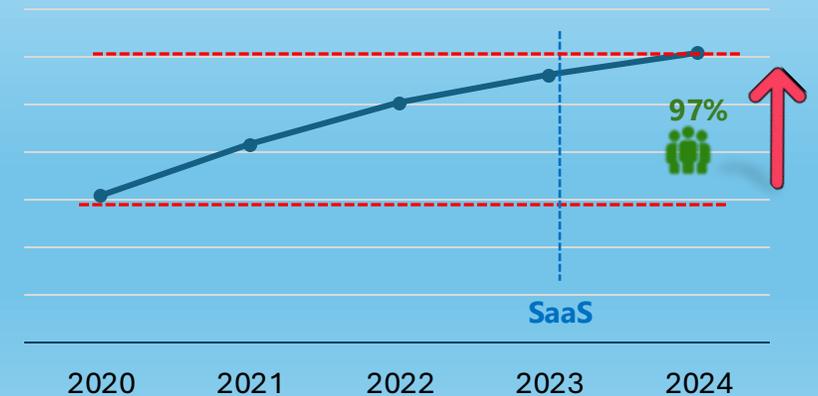
Instance & User Distribution



7 K Users
 100 K Documents
 425 M Signals



Seeq Upstream User Growth



Be an enabler not a barrier

Don't sit idle

Active customer engagement





The Vision





***Disclaimer: As an Agile company, we are led by the needs and desires of our customers. We think the strategic vision presented here is a darn good one, but it is provided for viewer entertainment and enjoyment only. Any similarities to real individuals is merely coincidental and should not be construed as fact or opinion against them or their pets.**



The Vision



The Vision

Climbing the pyramid

Models, Asset Builder, and Scaling Tables

New personas, new scope, all people

The Golden Goose

Building and using the Knowledge Mine

Leaning into AI

More than time series



The Vision

Better, Faster
Data-Driven
Decisions
For Everyone

