Chemours Adoption of Seeq

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CHEMOURS

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CHEMOURS

Speaker Introductions

John Wood

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Agenda

Chemours™

Background

Pilot and Building Justification

Roll-out & User Adoption

Current Implementation

Use-Cases

Next Steps

Summary/Conclusion

CONNEQT

Chemours at a Glance

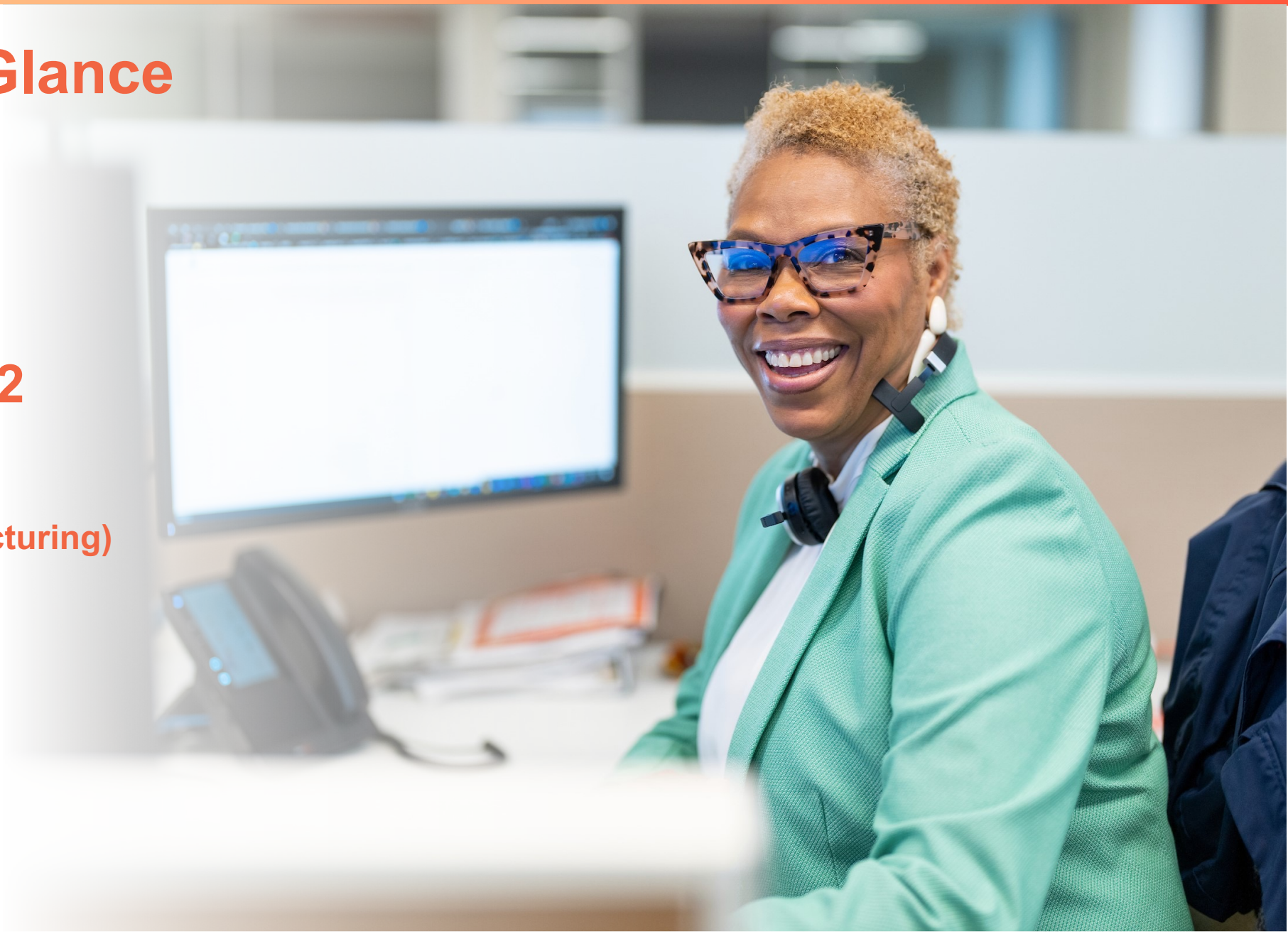
Founded
2015

Sales
$6.8 Billion in 2022

Employees
6,600 (~5,000 in manufacturing)

HQs
Delaware

NYSE
CC



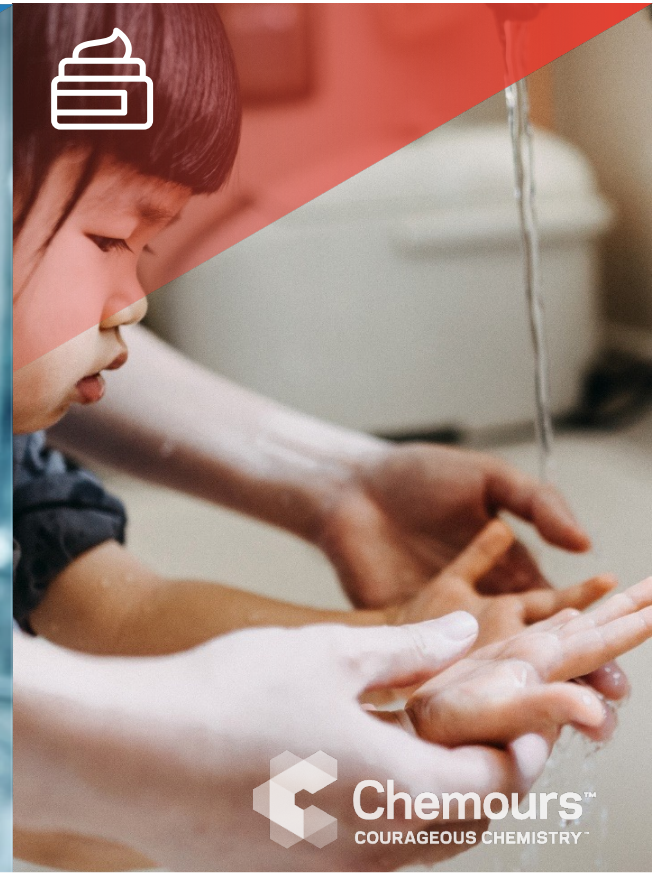
Our Business

TITANIUM TECHNOLOGIES

ADVANCED PERFORMANCE MATERIALS

THERMAL & SPECIALIZED SOLUTIONS

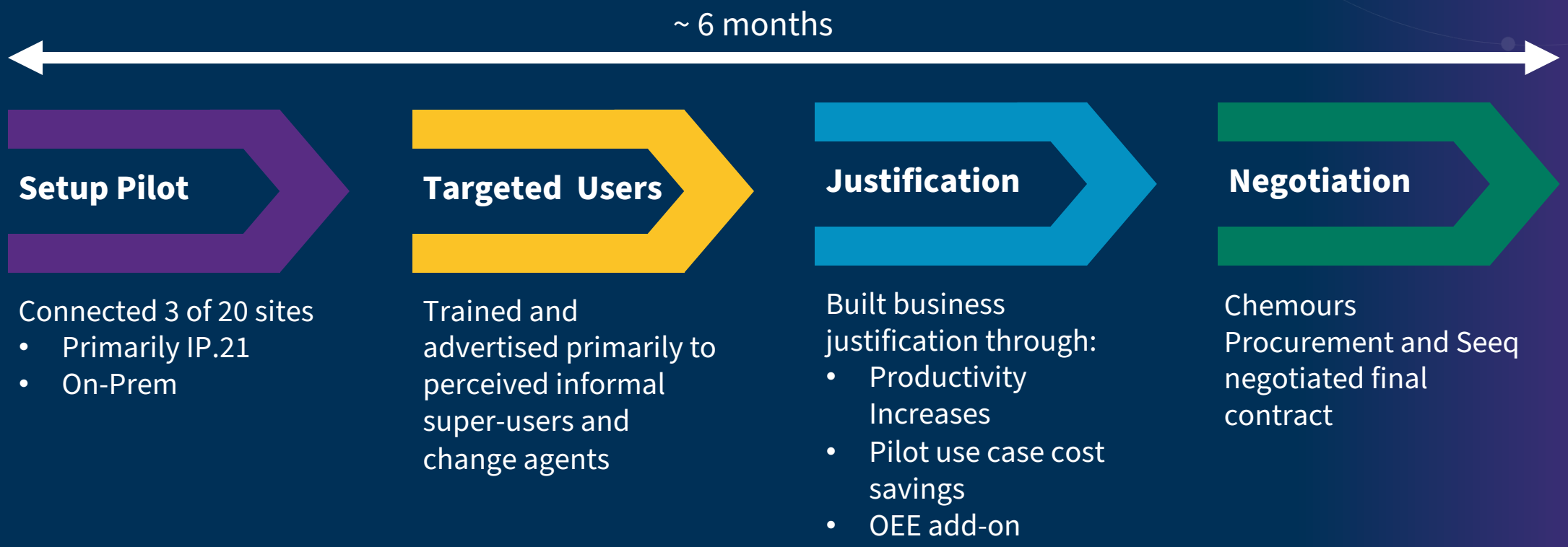
CHEMICAL SOLUTIONS



Chemours - Internal Use Only

Background

Pilot and Building Justification



Roll-Out

Readiness & Kick-Off
• Fanfare to build excitement
• MS Teams site/wiki
Connections
Connected primary data historians ASAP
Training
Heavily pushed Foundations training
Resources
Leveraged consultants and site champions
Tracking
BI dashboard for user training and engagement in software

User Adoption

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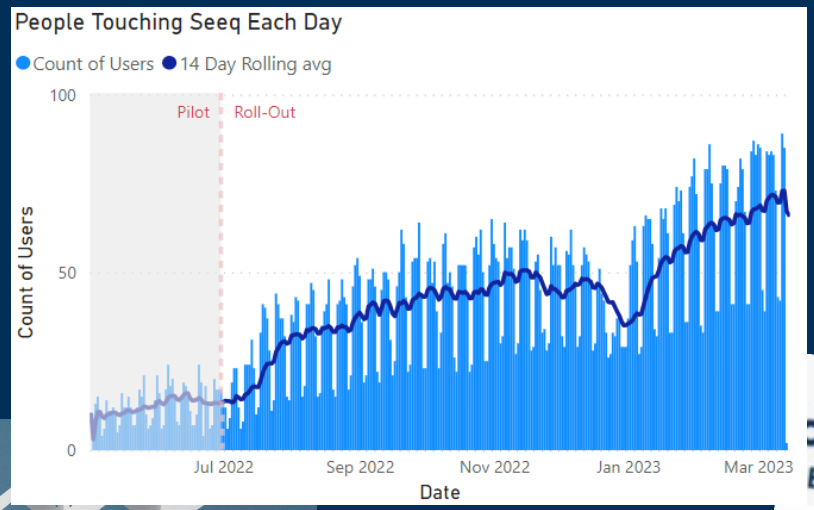
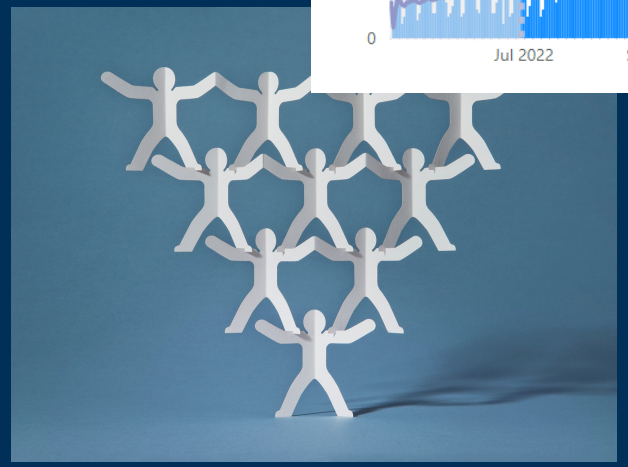
Teams Wiki

- Getting Started
  - 1. Requesting Access
  - 2. Quick Start
  - 3. Setup Training Acco...
  - 4. Enroll in Training
  - 5. Use Cases
  - 6. Untitled section
- Additional Training
- Finding More Help
- IP.21 Data
- LIMS Data
- Weather Data
- Data Source Naming
- Import Data
- Sharing Work
- Asset Trees/Groups
- Feature Requests
- PowerBI
- Seeq Add-Ons
- Shift Schedules
- Conditions/Capsule...
- Rolling Aggregates ...





Chemours Specific Foundations

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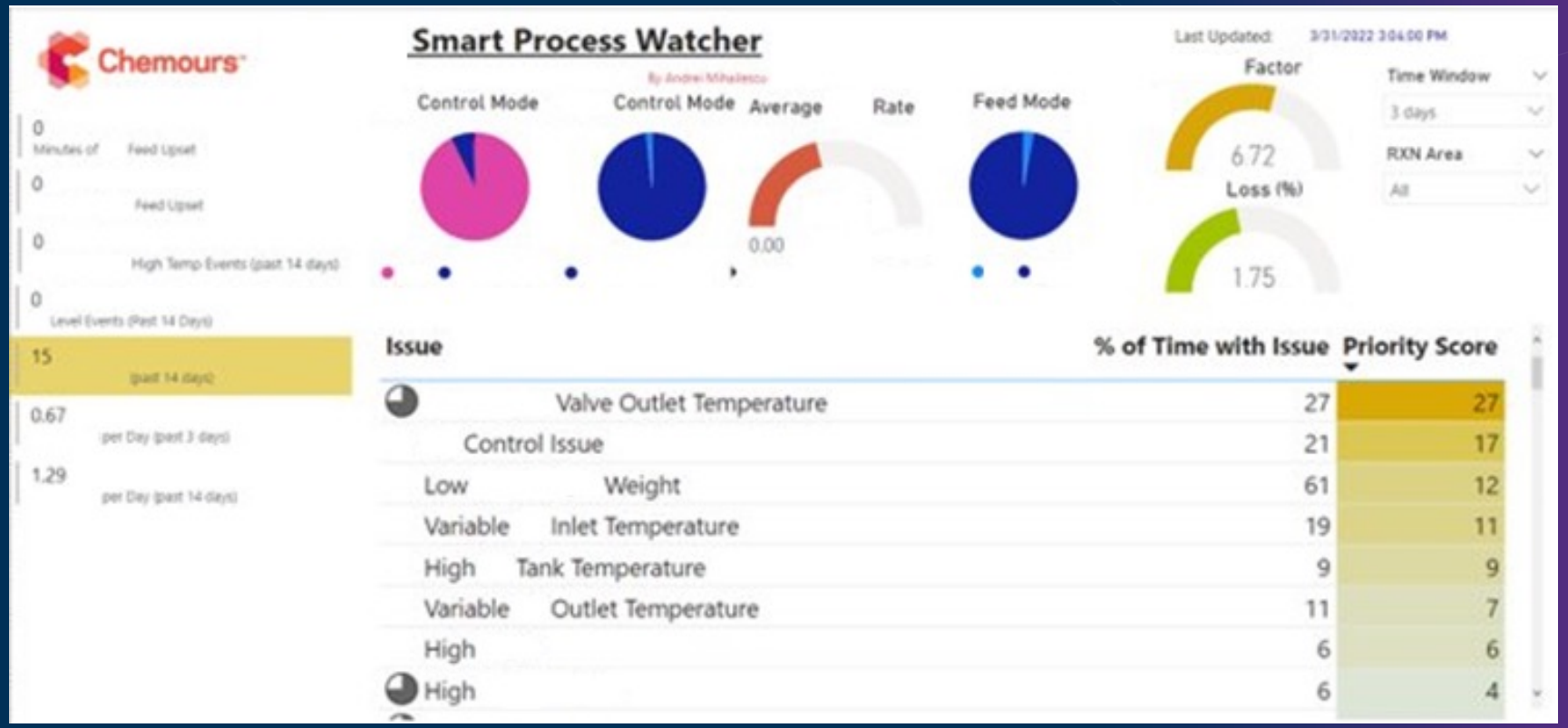
Current Implementation

Process Monitoring

- MS Power BI dashboard utilizing Seeq OData connection
- Monitors 100+ process parameters to provide insight into plant issues before they happen



Batch Process Entitlement Analyses

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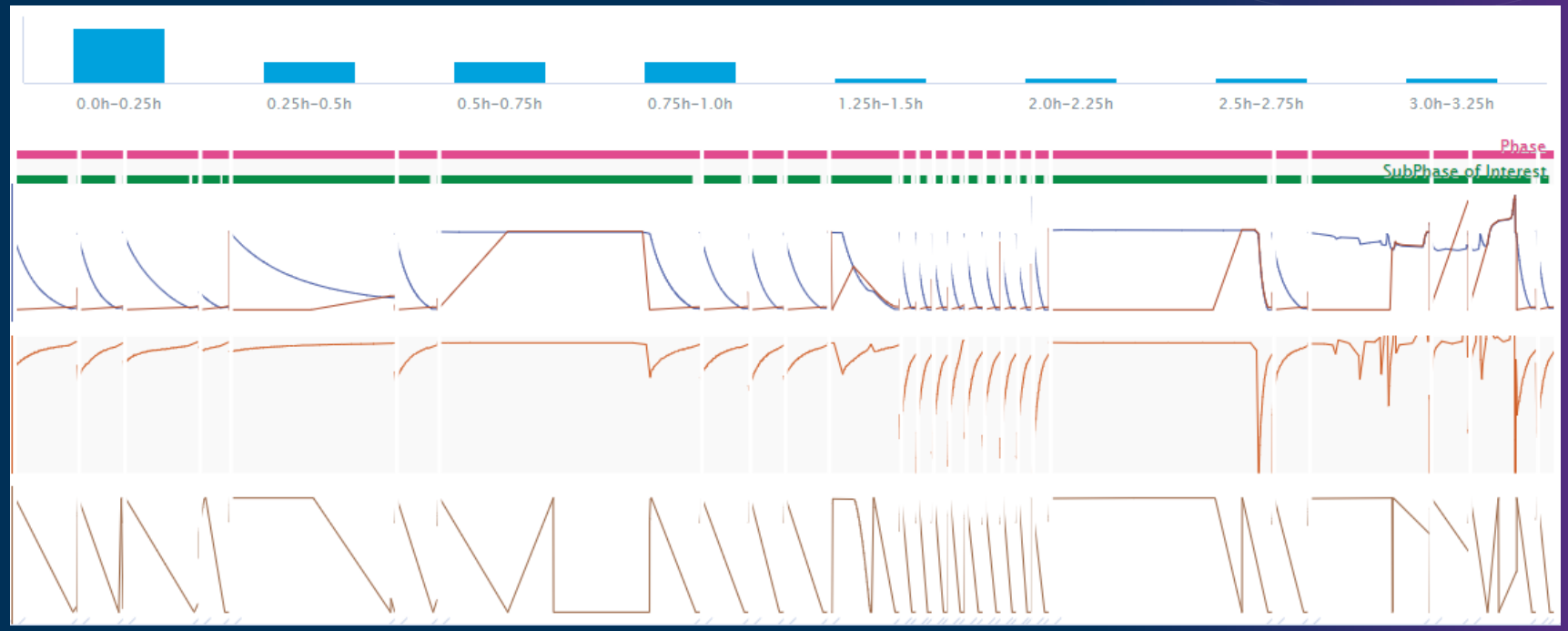
Analyzing batch phase variability

Break phases into components

- Especially helpful if process is not fully automated and requires operator interaction

Analysis isn't novel, but efficiency of insights allows for more ideation and less data engineering



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Seeq OEE Tools

Piloted across two production areas: one batch, one continuous

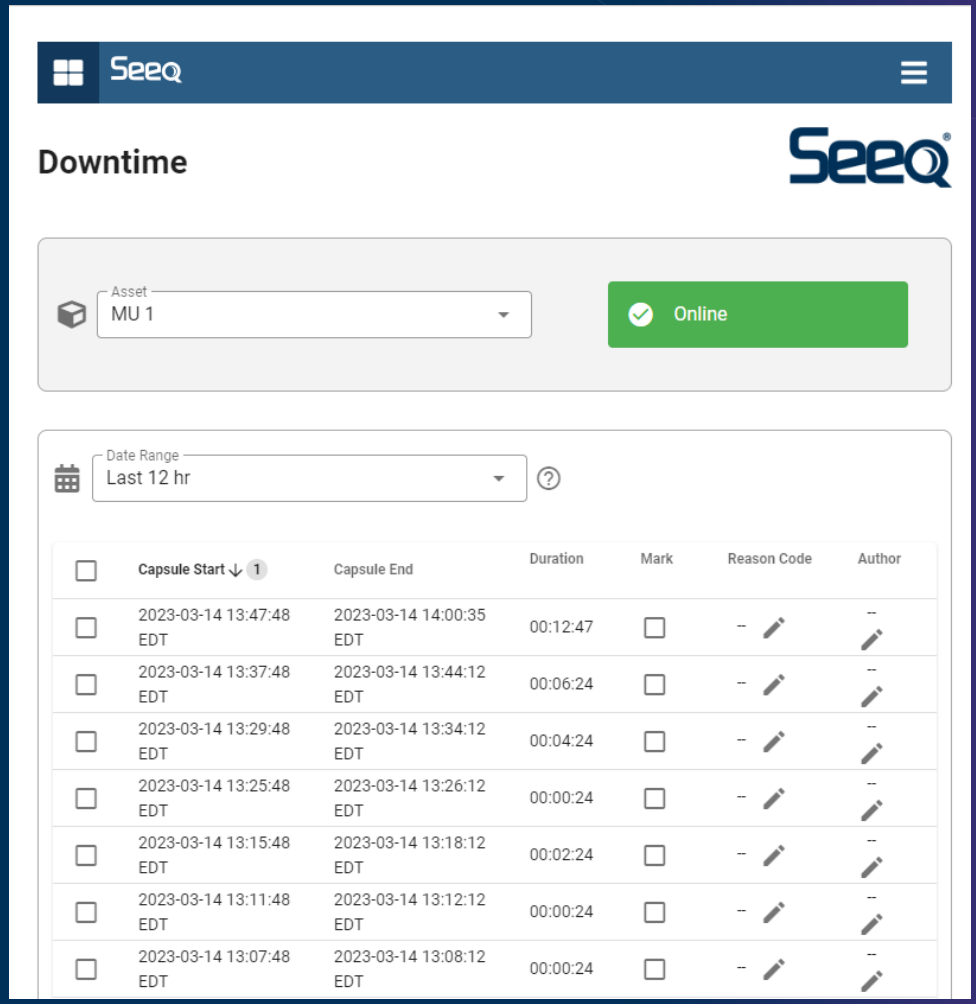
Developed digital readiness assessment

- Continuous processes are simpler to setup and higher likelihood of being ready
- Batch processes more complex and may require instrumentation or digitization of data to allow use

Integration with existing OEE reporting dashboards

Key user roles identified:

- Admin: Python and Advanced Seeq Capabilities
- Specialist: Advanced Seeq Capabilities
- User: Reason Code Entry



Empirical Model Monitoring/Deployment

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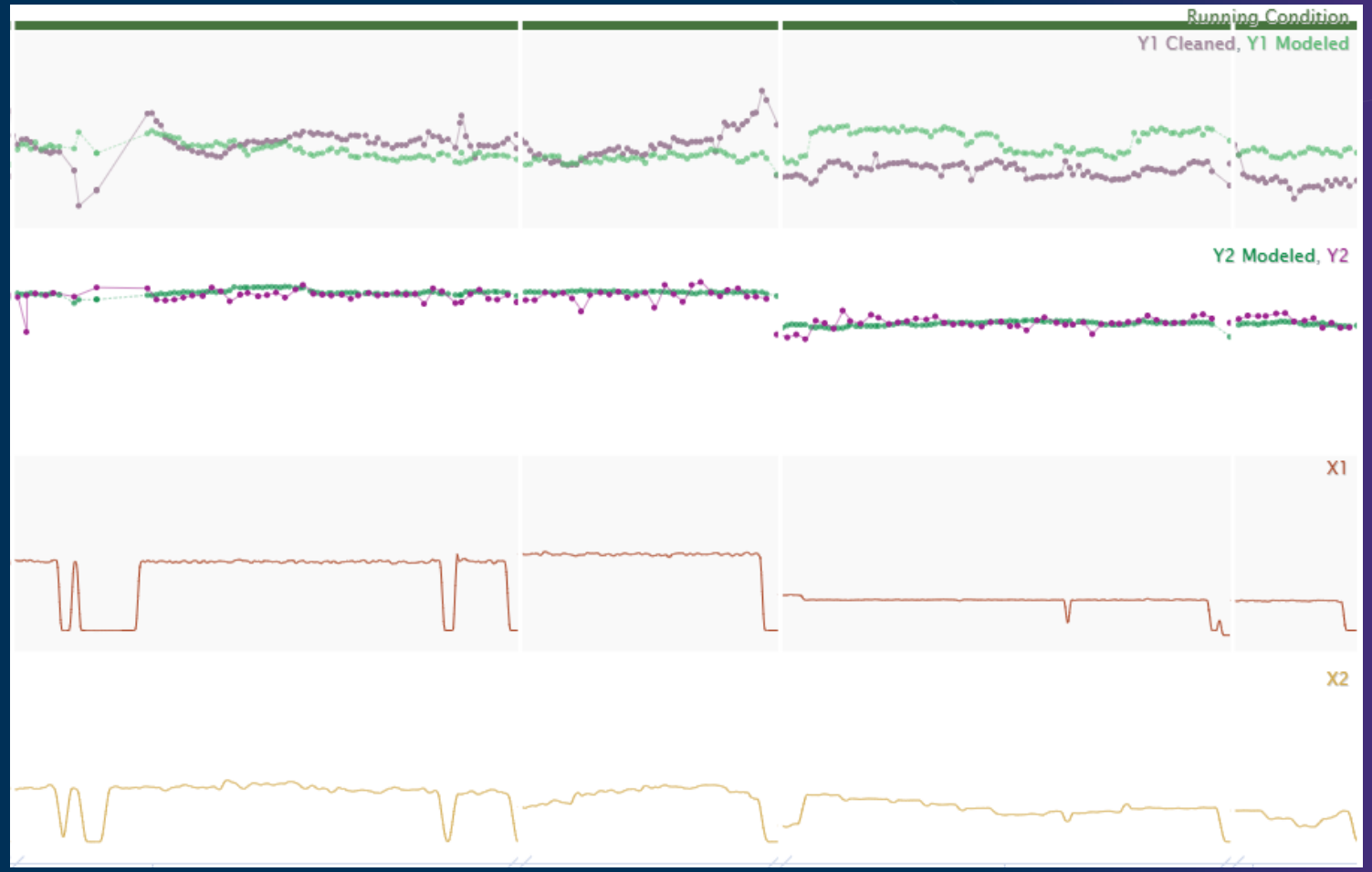
Allowed for model evaluation against real world data in near real-time

Process:

Developed empirical models using Python outside of Seeq

Transcribed model work into Data Lab using SPy to directly query process data

Deployed model results as new Seeq tags through scheduled runs of the Data Lab notebook



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Next Steps

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OEE Deployment

Use Case Repository Improvements

Additional Data Sources

- ERP
- Maintenance
- Operator Actions/Alarms

Expand User Capabilities

- Transition Site Champions to Experts
- Expand Data Lab literacy and use

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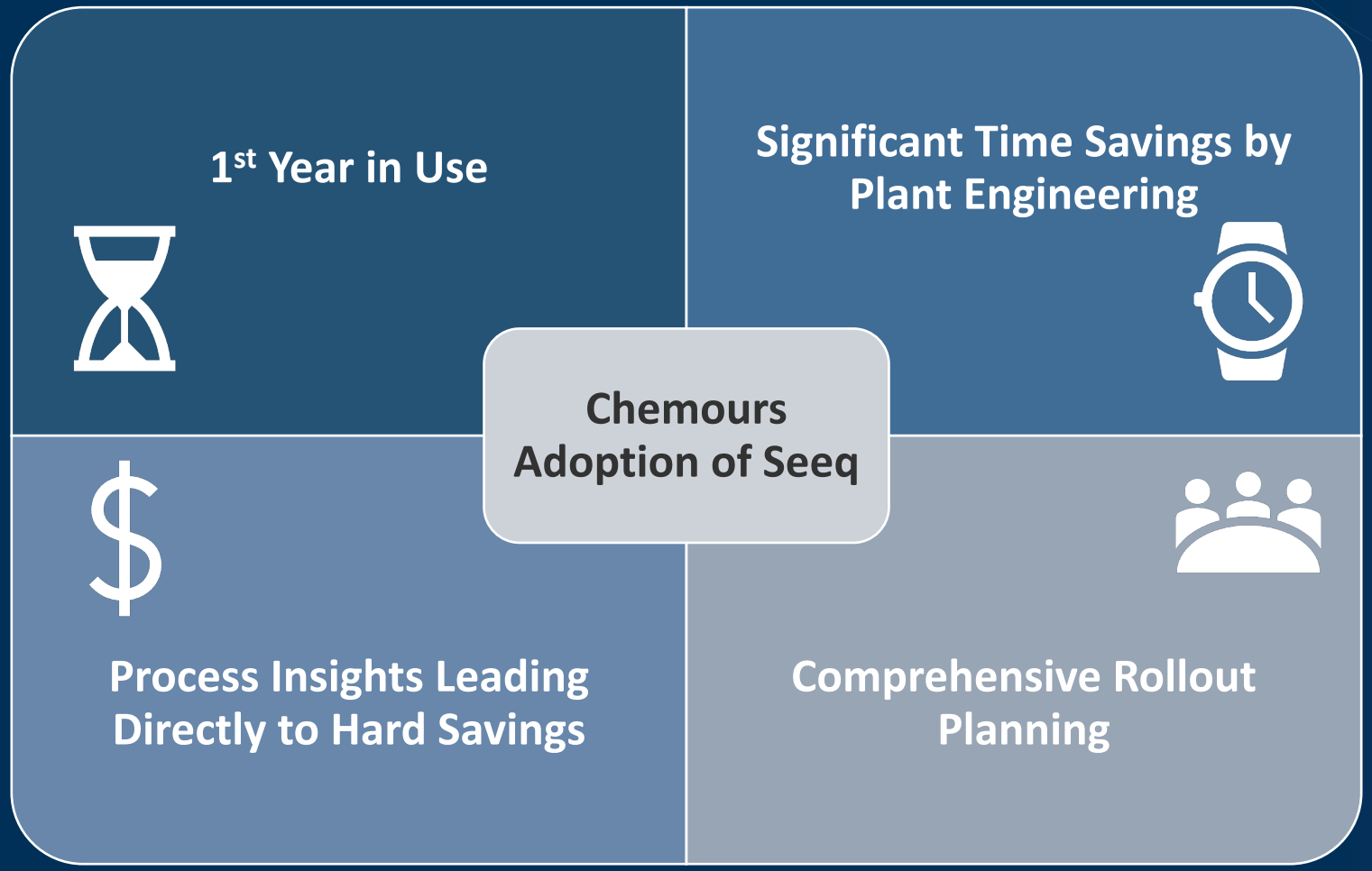
Summary/Questions



Thank you