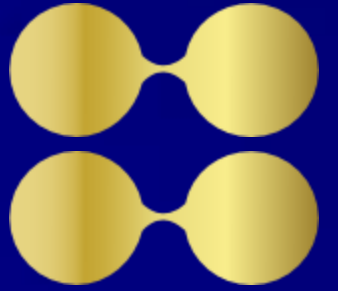


SeeQ®



connect

IEM & AI Track

#allin



Alex Fedrick

Principal Process Engineer-
Analytics & Innovation





Unlocking Insights with the Seeq AI Assistant

Alex Fedrick

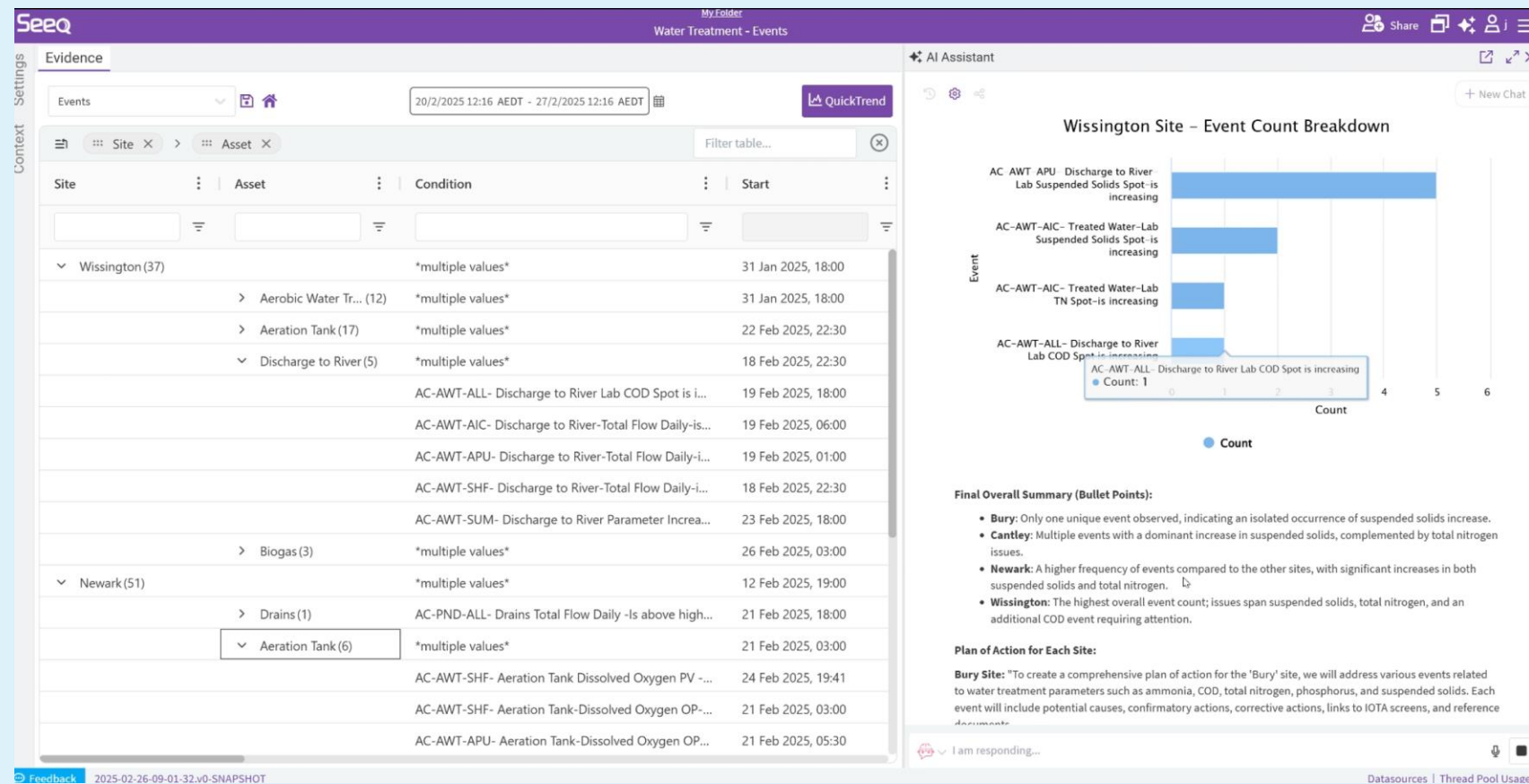
British Sugar

Principal Process Engineer-
Analytics & Innovation

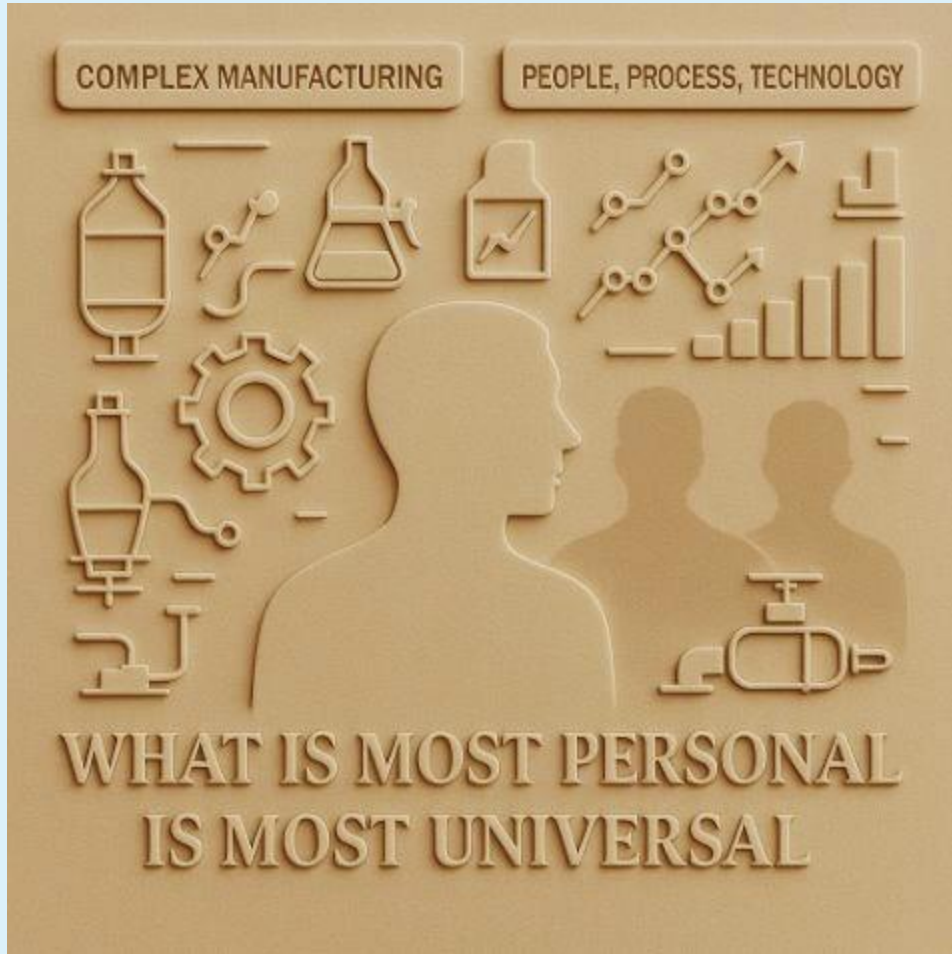
connect



Using the Seeq AI Assistant to Meet the Challenge of Organizational Change



Current challenges across industries



- Growing gaps in Knowledge and Experience
- Changes in employee expectations of what work is
- Changes in the way we learn and are able to focus
- Changes in the way we prefer to consume information

Introduction to British Sugar



8 million tonnes



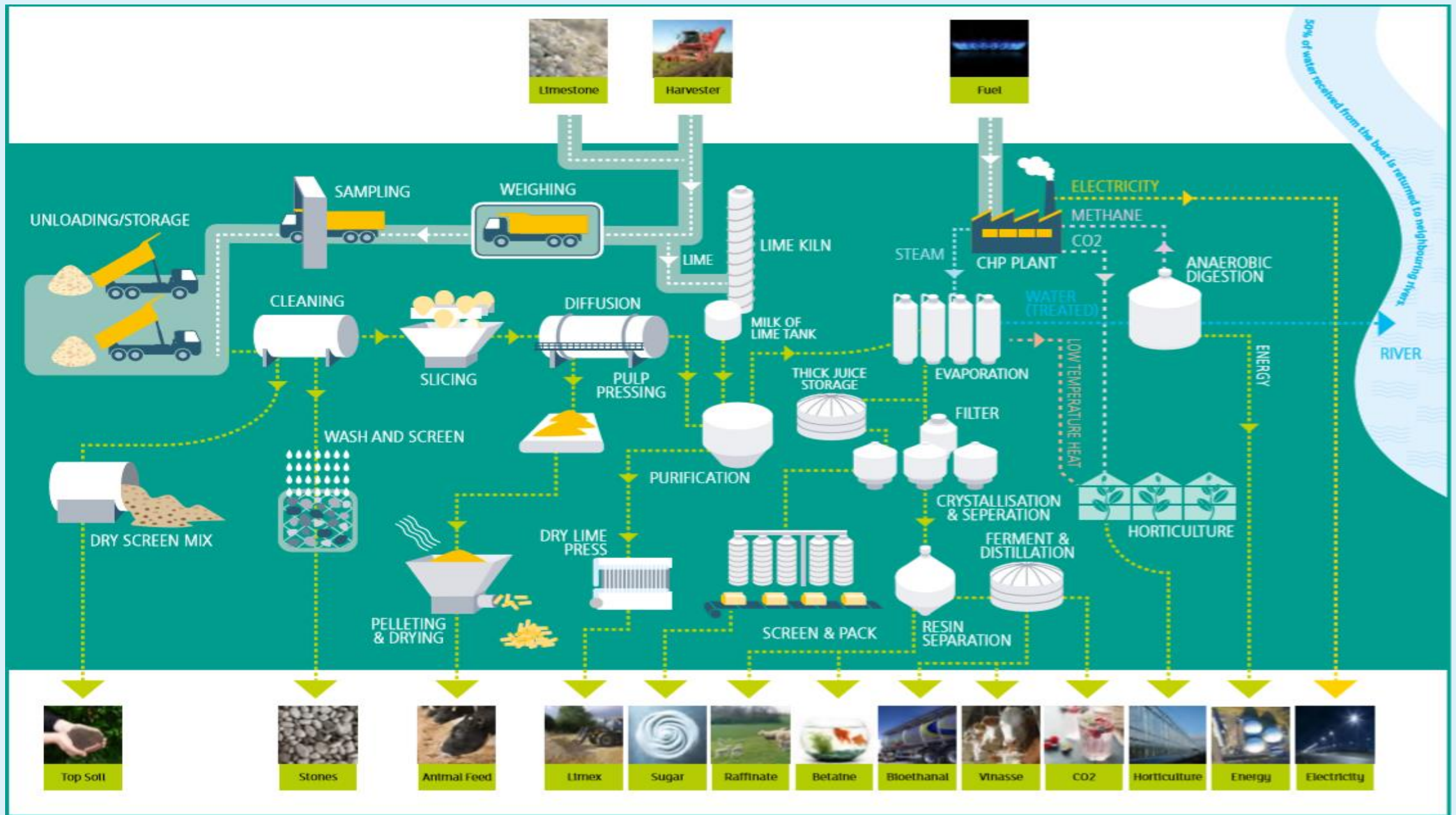
1.2 million tonnes



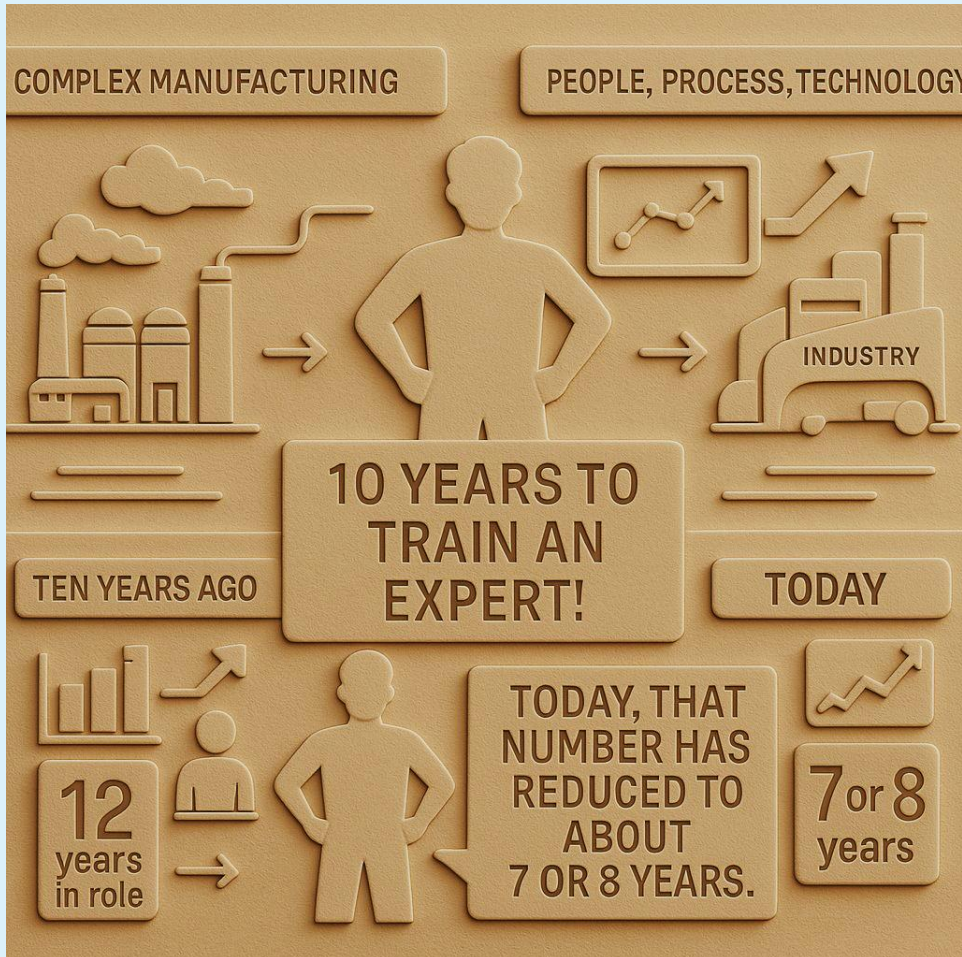
co-products

connect



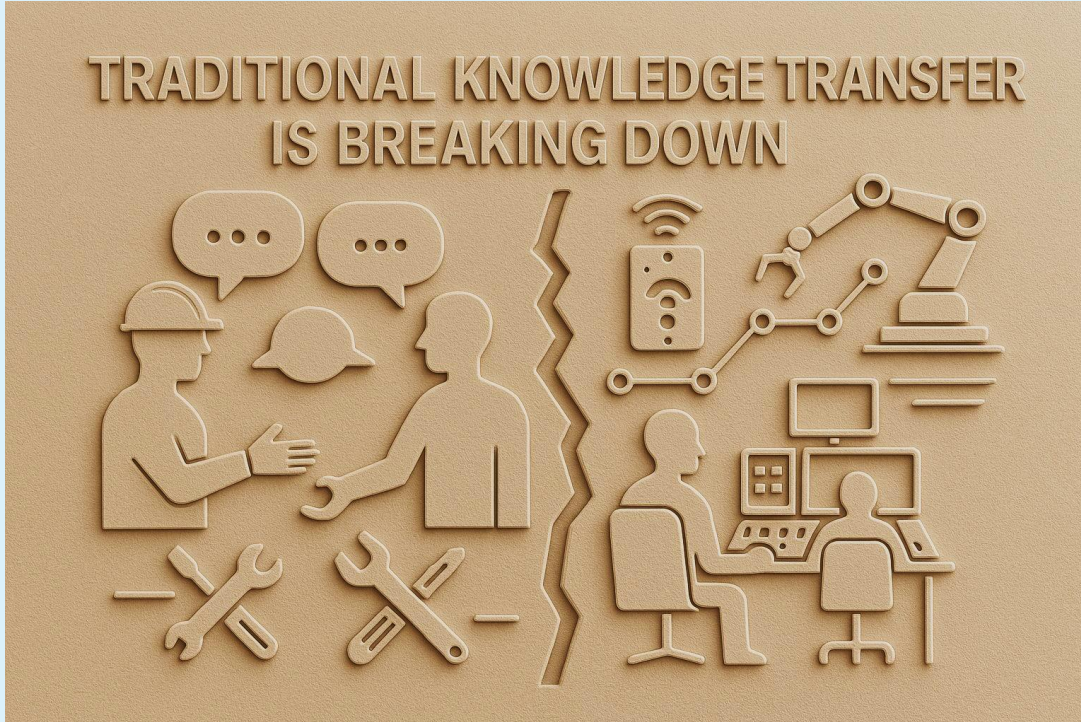


The burning platform that got us started



- We have less SMEs than in the past
- It takes us humans a long time learn and gain the experience required to be an SME. We think about 10 years
- Average in post now is 7 to 8 years
- Impacts both decision making and the ability to effectively mentor, people new to roles

Workforce and industry conditions are changing



- Long technical apprenticeships are no longer viable
- Automation and remote/mobile plant operations reduce human to human interactions and organic knowledge transfer
- Traditional course-work and testing may not be a good measure of ability
- Workforce expects rapid career progression



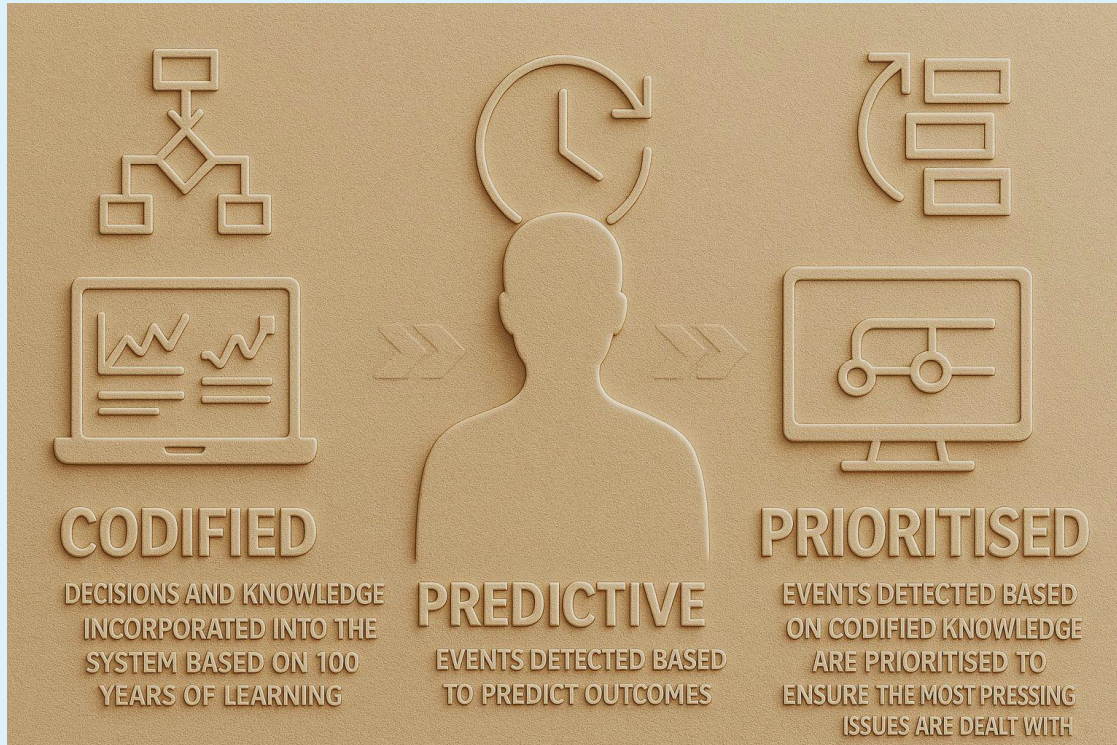
Initial Response: Augment with better tools



- Substantial investments in OT/IT infrastructure
- A comprehensive DCS overhaul and upgrade, deployment of a private 4G network to allow mobile operations
- Installation of additional online instrumentation
- Deployment of software tools like Honeywell Profit Suite, PI AF and Seeq to provide insight
- Developing State-of-the-art HMIs & Visualisation

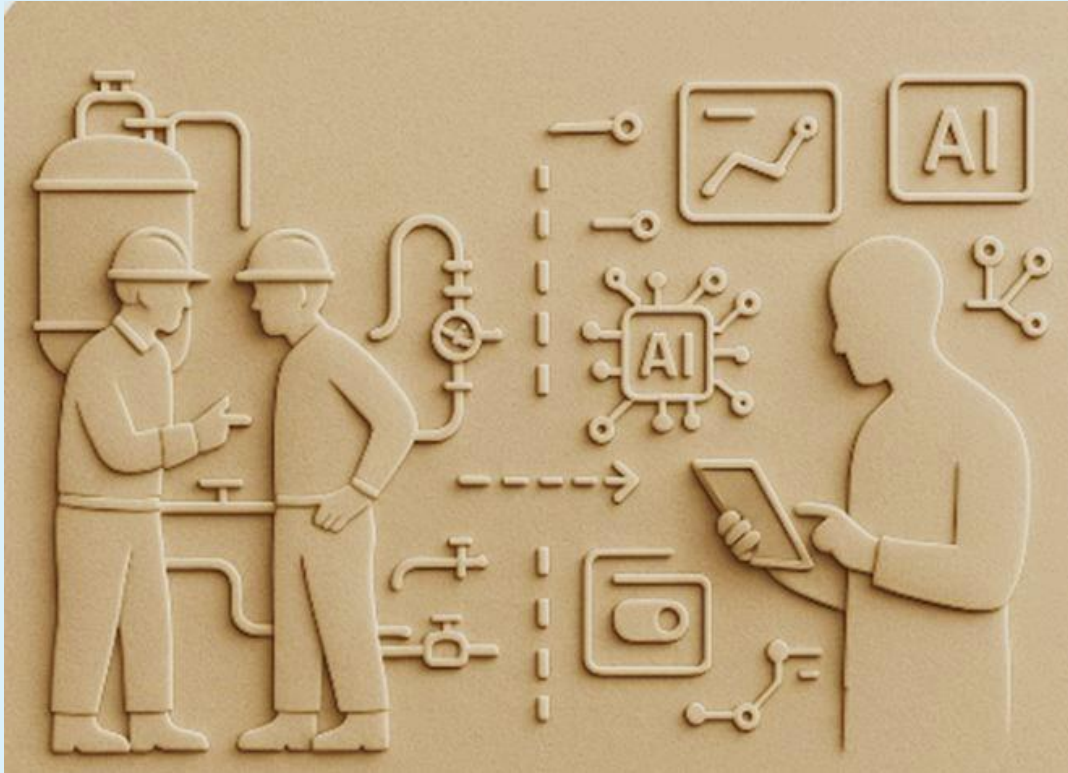
This on its own is not enough

Our Current Strategy

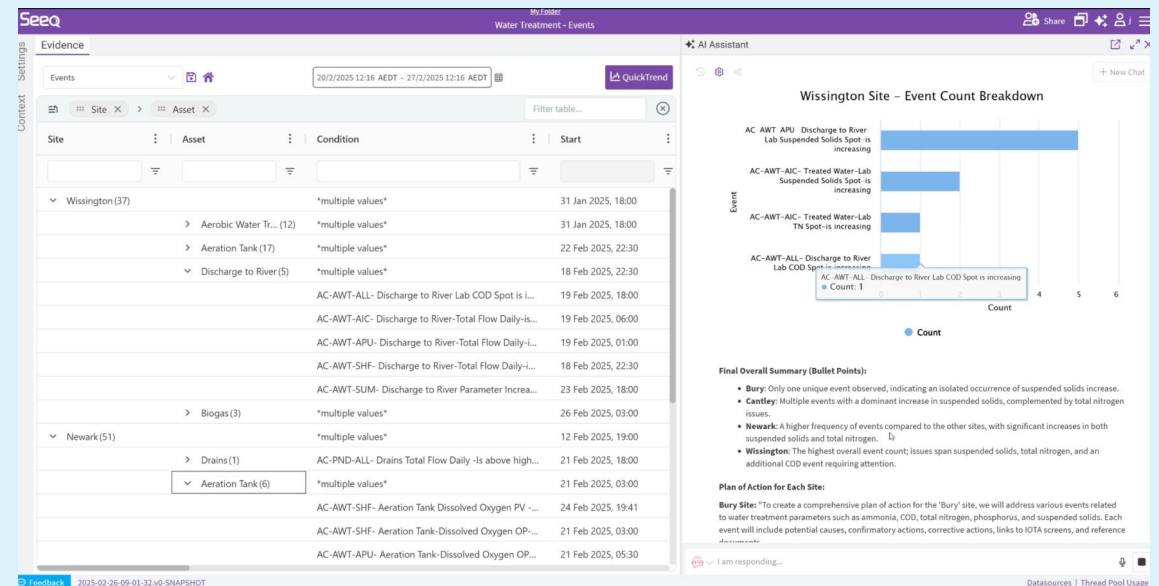


- Codify and capture over 100 years of accumulated insights
- Insights are immediately incorporated into predictive analytics workflows
- Generate prioritized and summarized outputs, ensuring the most critical issues are addressed first
- Make the output push as well as pull

Leveraging Current and Emerging LLM Agents

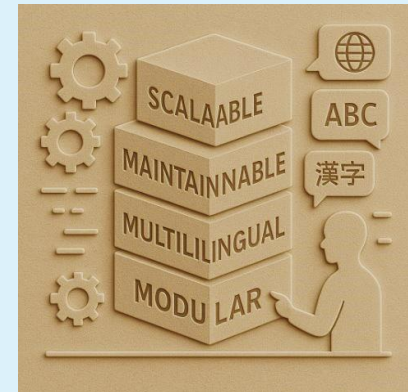
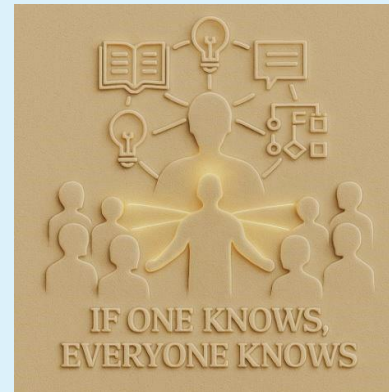


- Beyond corporate chatbot Seeq Analysis Agent
- Integrates analytics, corporate knowledge and Subject Matter Expert-driven operational priorities
- Real-time context, not just static knowledge



Headline Project Deliverables

- Halving the training time for process experts
- Democratization of knowledge — if one knows, everyone knows
- Expanding Subject Matter Expert effectiveness across larger spans of control
- Scalable, maintainable methodology, multilingual capabilities



Seeq

My Folder

Water Treatment - Events

Share

Context

Settings

Evidence

Events

20/2/2025 12:10 AEDT - 27/2/2025 12:10 AEDT

QuickTrend

Site X > Asset X

Filter table...

Site	Asset	Condition	Start	End
Wissington (37)		*multiple values*	31 Jan 2025, 18:00	27 Feb 2025, 07:00
	> Aerobic Water Tr... (12)	*multiple values*	31 Jan 2025, 18:00	26 Feb 2025, 18:00
	> Aeration Tank (17)	*multiple values*	22 Feb 2025, 22:30	26 Feb 2025, 04:06
	> Discharge to River (5)	*multiple values*	18 Feb 2025, 22:30	25 Feb 2025, 18:00
		AC-AWT-ALL- Discharge to River Lab COD Spot is i...	19 Feb 2025, 18:00	22 Feb 2025, 18:00
		AC-AWT-AIC- Discharge to River-Total Flow Daily-is...	19 Feb 2025, 06:00	24 Feb 2025, 18:00
		AC-AWT-APU- Discharge to River-Total Flow Daily-i...	19 Feb 2025, 01:00	24 Feb 2025, 18:00
		AC-AWT-SHF- Discharge to River-Total Flow Daily-i...	18 Feb 2025, 22:30	24 Feb 2025, 18:00
		AC-AWT-SUM- Discharge to River Parameter Increa...	23 Feb 2025, 18:00	25 Feb 2025, 18:00
	> Biogas (3)	*multiple values*	26 Feb 2025, 03:00	27 Feb 2025, 07:00
Newark (51)		*multiple values*	12 Feb 2025, 19:00	26 Feb 2025, 10:02
	> Drains (1)	AC-PND-ALL- Drains Total Flow Daily -Is above high...	21 Feb 2025, 18:00	22 Feb 2025, 18:00
	> Aeration Tank (6)	*multiple values*	21 Feb 2025, 03:00	24 Feb 2025, 19:59
		AC-AWT-SHF- Aeration Tank Dissolved Oxygen PV -...	24 Feb 2025, 19:41	24 Feb 2025, 19:59
		AC-AWT-SHF- Aeration Tank-Dissolved Oxygen OP-...	21 Feb 2025, 03:00	21 Feb 2025, 17:58
		AC-AWT-APU- Aeration Tank-Dissolved Oxygen OP...	21 Feb 2025, 05:30	21 Feb 2025, 17:58

AI Assistant

Agent Q

I specialize in providing answers to general aspects of Seeq.

Select Agent

Our AI Assistant Agents are subject matter experts. Select the right agent for the best results.

General

Ask about Seeq or industrial analytics

Formula

Ask about Seeq Formula for any use case

Data Lab

Ask about Data Lab and Python

Actions

Ask me to do analytics or change your display

Agent Q

Ask about your operations, events, and root cause analysis

Ask me about Insights

Feedback

2025-02-26-09-01-32.v0-SNAPSHOT

Datasources | Thread Pool Usage

connect

Summary



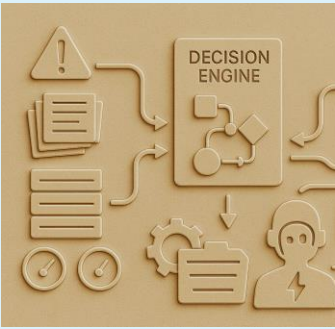
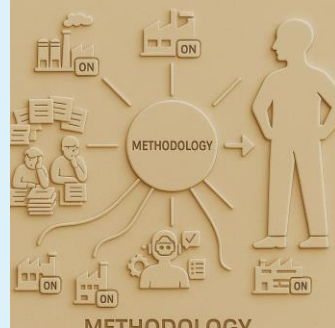
- Seeq Agent eliminates Human bottlenecks caused by manual data consumption.
- It encodes Subject Matter Expert knowledge and thought process directly into automated workflows, encoded in natural language in organiser Topics
- It consistently delivers clear, prioritized actions, even in the absence of immediate Subject Matter Expert involvement.

Impact

- Efficiency Gains: Complex 70-80 step SME workflows, once taking hours now completed in minutes x10 faster
- synchronous Running free's SME's up to perform other tasks
- Allowed SMEs to increase their span of control by x 4
- Allowed Site teams to increase their response time and reduce the impact of adverse events



Our Next Steps



- Development of the knowledge capture pipeline
- Prompt scheduling, triggering and templating
- Further Development of Analysis Agent workflows to include
 - More advanced analytics and ML possibilities
 - Enhanced prioritisation methods
- Further Integration of the output into other workflows and existing desktop tools
- Rollout of the methodology to other process units and domains



Invite to Q&A

Big thanks to the people who are making this project successful

Seeq

AI Gurus who make the magic happen

James Higgle, Emilio Conde and Andres Barbaro

British Sugar

Dan Simkiss and James Caws

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