



DISC Show & Tell 2025

Digital Interoperability as a Business Accelerator – Recap

Executive Summary

The energy and process industries are facing a perfect storm:

- Rising project costs
- Increasing technical complexity
- Tighter sustainability and regulatory demands
- And a generational shift driven by AI and automation

Yet most projects still rely on **fragmented data, document-heavy workflows and manual handovers**. The result is predictable: delays, rework, risk and massive value leakage. The problem doesn't stop with the projects – it continues into operations, which are the unlucky heirs of this problem.

DISC Show & Tell 2025¹ demonstrated that:

- The **business case for digitalization and industry collaboration is proven**
- The **technology is mature**
- The **standards are available**
- What remains is **industrial-scale implementation**

AI will not transform the industry on its own.
Only structured, validated, and machine-understandable data will provide
the foundation for industrial AI.

This is why **DISC exists**: to remove the barriers between companies and prove together how digital collaboration works in practice. And this is why **PCA is critical**: to ensure that the standards enabling this transformation are available as **live, machine-readable digital infrastructure**, not static PDFs.

¹ Recordings from the event are made available on PCA's [Youtube channel](#).

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1. Day 1 – The Strategic Message: Data Is the New Industrial Foundation

1.1 The Eye-Opener

Speaker: Bård Henning Tvedt – Information Modeler, Webstep

The opening demo lived up to its name: a short, surprising live walkthrough that challenged how we normally investigate incidents.

Using a fictional asset, the demo showed how a **connected digital asset model (i.e. knowledge graph)** can be used to follow an alarm across systems, reveal hidden dependencies, and quickly narrow in on a plausible root cause – without jumping between documents.

The scenario itself was deliberately exaggerated. The point was simple:

When data flows, insight follows.

1.2 The Wake-Up Call: “AI Is Useless Without Data You Can Trust”

Speaker: Karl Johnny Hersvik – CEO, Aker BP

Karl Johnny’s keynote set the tone for the entire event with a message that cut through all hype:

“AI is not just another tool. It is a tectonic shift in how work will be done. But without structured, standardized and trusted data, AI is basically useless.”

He described today’s industrial landscape as a collection of digital “libraries” – data locked inside silos, guarded by systems that don’t talk to each other. The result is massive data volumes with limited business value.

The message was unambiguous:

The industry must move from **document-based work and isolated systems** to **continuous data flow across the entire value chain**. Only then can AI, automation, and predictive operations deliver real and scalable impact.

*[Editor’s reflection: This is why DISC matters – proving, in practice, how data can move across company borders. And it is why PCA is critical – turning standards into **digital, machine-readable infrastructure** that enables interoperable data flow at a large scale.]*

For further details, please see a copy of Karl Johnny’s DISC Show & Tell 2025 keynote with comments from DISC on [PCA’s website](#).

1.3 Equinor: A New Way of Working Is No Longer Optional

Speaker: Daniela Leite – VP Future Operations, Equinor

Daniela delivered a clear message from an operator's perspective: the industry can no longer rely on working methods built over the last 30 years.

Equinor's ambition is to maintain production on the Norwegian Continental Shelf towards 2035—despite:

- A more mature asset base
- Higher cost pressure
- And stricter climate and efficiency requirements

This will require:

- New ways of designing and modifying assets
- Tighter collaboration across companies
- And far more effective use of digital and data-driven methods

Her conclusion was direct:

What worked yesterday will not sustain value creation tomorrow!

1.4 Interoperability in Practice: From Engineering to Operations

Speaker: Anders Bjørsvik (Senior Advisor Automation, Equinor) & Arsalan Pasdar (Improvement Manager, Aibel)

This session showed how **interoperable asset data** can finally connect:

- Engineering systems
- Automation systems
- And cloud platforms

Using standards such as **Asset Administration Shell (AAS)**, **OPC UA** and **structured system models**, the teams demonstrated how equipment data, control logic and operational information can flow digitally across the value chain.

Business value:

- Faster commissioning
- Automatic configuration of control systems
- Reduced manual engineering
- Better operational insight from day one

This is a concrete example of how **standardized data** replaces document-based handovers.

1.5 Digital Construction at Scale: Yggdrasil Topside

Speaker: Trude Kolstø – Project Manager, Aker Solutions

Trude Kolstø shared how the **Yggdrasil topside project**—one of the largest ongoing industrial developments in Europe—is applying digital execution in practice.

Key changes:

- Engineering, procurement and construction now run **in parallel**
- Visual, real-time planning replaces static progress reporting
- Design issues are detected digitally before becoming physical rework

Business impact:

- Reduced manhours
- Better HSE performance
- Higher predictability
- Significantly less rework

This was not a pilot. This is **full-scale digital execution on a 30,000-ton offshore topside, with extraordinary change management and grassroots involvement.**

1.6 Aker Digital Alliance 2.0: Digitalization as a Business Strategy

Speaker: Thomas Bognø, Alliance Director – Aker Digital Alliance, Aker BP

Thomas Bognø explained how the **Aker Digital Alliance (ADA)** has moved from experimentation into **core business transformation.**

The ambition is explicit:

- Redesign work processes across engineering, operations and maintenance
- Use automation and AI to remove manual tasks
- And extract **multiples of productivity—not incremental improvements**

For Aker BP, ADA is a key driver for:

- Lower project cost
- Faster modifications
- And higher operational efficiency

For Aker Solutions and technology partners (Cognite & Aize), it is the foundation for:

- Faster project delivery
- New digital services
- And long-term competitiveness

1.7 Why DISC Exists: Turning Fragmented Data into Business Value

Speaker: Charles Halaas – IT Manager, Aibel

Charles Halaas anchored the DISC mission firmly in business impact.

Today's projects still start with:

- Static documents
- Fragmented data

- And weak consistency across systems

This drives:

- 20–40% cost and schedule overruns
- Long decision cycles
- And heavy rework

DISC exists to change this by:

- Proving new digital ways of working across company borders
- Developing common concepts, standards and use cases
- And accelerating adoption into real projects

The core message:

Standardized, shared data is the foundation for capital-efficient and predictable projects.

Charles' talk elaborated on this year's DISC Show & Tell use cases. For the sake of the summary, these have been left out, but details are available on [DISC's area on PCA's website](#).

1.8 From Standards to Digital Infrastructure

Speaker: Frank Possel-Dölken – CDO, Phoenix Contact

The final technical session of Day 1 focused on **data logistics and Asset Administration Shell (AAS)** as the backbone for scalable digital collaboration.

The message was that future data exchange will not be based on:

- File transfers
- Or system-specific integrations

But on:

- Live digital objects
- With standardized identities
- And machine-readable semantics

This is what enables:

- Interoperability across vendors
- AI-driven automation
- And true lifecycle information flow

An important reflection delivered by Frank, was the fact that cyber-security adds further requirements for precise asset management, for which AAS is a good example.

1.9 EqHub + AAS = A True DISC Love Story

Speaker: Knut Dagsvik (Senior Consultant, Offshore Norway) & Jon Kåre Solås (Market Responsible VMM Process, Phoenix Contact)

This session showed how **EqHub and Asset Administration Shell (AAS)** together enable a truly interoperable offshore supply chain.

By combining:

- Standardized product data from EqHub
- With live digital asset representations through AAS

The supply chain can move from:

- Manual data requests
- To **direct machine-to-machine integration**

Business value:

- Faster equipment selection
- Fewer data errors
- Stronger traceability
- Better lifecycle documentation

This was a clear demonstration of how **digital standards turn collaboration into a competitive advantage**.

[Editor's reflection: This presentation highlights the importance of organizations like PCA in defining f.ex. shared digital languages, symbol libraries, and taxonomies.]

1.10 Call to Action – From Pilots to Industry-Scale Execution

Speaker: Ine Dolve – SVP / Asset Manager Alvheim, Aker BP

Speaking from the perspective of her own **operating asset**, Ine Dolve did not present a finished digital success story. Instead, she presented something far more important: a **clear, concrete operational need** that the industry must now solve—together.

Her message was that today's assets are becoming more complex to operate and modify, while at the same time:

- Fewer people are available
- Change cycles must become faster
- And the tolerance for error is steadily shrinking

In this reality, she underlined that:

- **Manual, document-based work is no longer sustainable**
- **Disconnected systems create real operational risk**
- **And lack of consistent data directly limits safe and efficient execution**

What she asked for was not new tools in isolation, but **what DISC is facilitating**:

- Shared digital ways of working

- Standardized, structured information
- And interoperability across suppliers, EPCs and operators

Her message to the ecosystem was unambiguous:

Achieving future targets is impossible without deep cooperation across the ecosystem.

The need is already here on the assets. Now the industry must deliver the solutions in practice.

And her call to action followed naturally:

Move from pilots to real implementation – where operations actually happen.

1.11 Day 1 Close Out – Turning Operational Need into an Industry-Wide Capability

Speaker: Kjartan Brekke – Project Director, Modifications Manager ADA 2.0, Aker Solutions

Building directly on Ine Dolve's operational message, Kjartan Brekke closed Day 1 by lifting the perspective from **individual asset needs to industry-wide change**.

Where Ine described a **concrete demand from operations**, Kjartan described the **structure required to actually respond to that demand**.

Kjartan summarized DISC's mission as:

- A **neutral, trust-based collaboration arena with a common vision**
- Where operators, EPCs and suppliers can work together
- To define **common ways of working, shared concepts and digital foundations**

Not as theory, but as a way to ensure that what is needed on the assets can:

- Be developed jointly
- Be proven in practice
- And be scaled across companies instead of being rebuilt in silos

Kjartan's message was that no single company can solve this alone—because:

- The data spans company borders
- The workflows span disciplines
- And the execution spans suppliers, EPCs and operators

Kjartan's conclusion tied the day together:

The needs from operations are now clearly defined. DISC provides a platform to turn those needs into shared, scalable industry capabilities.

And just as importantly:

*The value will not come from who moves alone
– but from who moves together.*

2. Day 2 – The Future on Stage

Day 2 was not about polished end-state solutions.

It was about **showing – live – what the industry can already do today when data is structured, standards are shared and platforms actually talk to each other.**

What normally takes months of integration, manual checks and document chasing was demonstrated in minutes. Not as promises. As live workflows.

The message from the stage was clear:

The future is no longer a roadmap slide. It is already technically possible – the only missing piece is large-scale adoption.

All day 2 mainstage presentations were recorded and are available on [PCA's Youtube channel](#).

2.1 Aucotec – AI-Powered Engineering with Engineering Base - From Legacy Diagrams to structured digital plant models

Aucotec showed how **non-intelligent legacy diagrams can be lifted straight into structured engineering models using AI**, without passing through endless manual rework first.

This is not about convenience.

This is about **turning decades of brownfield data into a living digital engineering foundation.**

What this unlocks:

- Dramatically faster engineering startup
- Consistent master equipment data
- Digital twins that are usable immediately – not months later

2.2 Siemens – Standardized Data Exchange and Innovations in Process Engineering

Siemens demonstrated how **simulation data, equipment data and documents** can flow **straight into COMOS without human copy-paste drama**.

The real impact is not just speed – it's **removal of human error from the value chain**.

What this unlocks:

- Major reduction in manual engineering
- Faster design loops
- Stronger trust in lifecycle data

2.3 Aker Solutions, Aize & Cognite – From Months of Work to One Day

This demo showed what happens when **AI, data platforms and 3D engineering** finally work **as one continuous flow**.

Operator needs triggered:

- Automated simulations
- Automated equipment selection
- Automated validation
- Automated 3D fit checks

All in minutes – not months.

What this unlocks:

- Decisions at the pace of business
- Far lower project risk
- A completely new relationship between early-phase studies and execution

2.4 Draga – Connected P&ID

Draga showed how P&IDs no longer have to be fragile drawings frozen in time.

They can become **intelligent, cloud-based system models with built-in validation**.

This is not about prettier drawings.

This is about **removing uncertainty from modification and operations work**.

What this unlocks:

- Faster modification projects
- Less rework
- Stronger digital continuity from engineering into operations

2.5 PCA – From PDF Standards to “Standards on Demand”

The PCA session used a simple but powerful analogy:

Standards today are where music was before Spotify — locked away in static files, hard to access, hard to integrate, and rarely used directly in digital workflows.

The vision presented was to move toward **“standards on demand”**:

- Always available
- Machine-readable
- Referenced by stable identifiers
- And usable directly through APIs in engineering tools and digital systems

Instead of engineers interpreting PDFs manually, systems themselves can start using standards as **live digital building blocks**.

What this opens up:

Faster implementation of common rules, automated validation, and far more consistent use of standards across projects, tools and companies.

2.6 Semantum – Convert legacy drawings to intelligent data with Model Broker

Semantum tackled one of the industry’s biggest silent problems:

all the intelligence trapped inside old P&IDs that no system can actually use.

By converting legacy diagrams into **DEXPI 2.0–compliant, machine-readable data**, they showed how sleeping knowledge can be reactivated.

What this unlocks:

- Massive time savings in modernization
- Direct reuse in simulation and AI

A real digital future for brownfield assets

2.7 Cadmatic - Shaping the future of plant data: from archives to living digital twins

Cadmatic demonstrated how design tools **can already exchange structured information directly**, instead of relying on drawings and file-based handovers.

The focus was on how **standardized, object-based data** can flow between engineering disciplines and into downstream systems — without losing meaning along the way.

What this points toward:

Faster multi-discipline engineering, fewer translation errors between tools, and a smoother path from design into fabrication and operations.

2.8 Google & Cognizant – Reimagining processes in the Oil & Gas industry

Google and Cognizant demonstrated how **multi-agent AI** could, in time, take on larger parts of **engineering and procurement workflows**—from document interpretation to supplier comparison and decision support.

The demo shows **the automation possibilities that are within reach through Agentic AI**.

What this unlocks:

- Faster workflows
- Reduced manual coordination

New productivity potential – if adopted responsibly and at scale

2.9 Webstep – The Intelligent Facility: The Magic of Data

Webstep challenged one of the industry's most sacred rituals: **manual consistency checking**.

By converting P&IDs into **connected graph-based facility models**, they showed how “yellow line” work can disappear into automated verification.

What this unlocks:

- Orders of magnitude faster consistency checks
- Better modification safety
- Predictive, not reactive, facility engineering

They also posed the question, «Do we really need P&IDs themselves?», to which the jury consisting of PCA's Board Members answered, «No, not really».

2.10 Breakout sessions

Though the main-stage demos on DISC Show & Tell 2025 were all linked to the four industry use cases created by DISC beforehand, space was also made for important topics not directly linked to this. This was facilitated through two parallel breakout sessions in the middle of the day, described below.

2.10.1 UiO & Envestor – Making ID Management Consistent Across Systems w/IMF

Presenters: Martin Skjæveland & Arild Waaler (UiO) and Erlend Fjøsna (Envestor)

The IMF breakout focused specifically on one of the industry's most persistent challenges: **managing identifiers consistently across tools, disciplines and lifecycle phases**.

Instead of treating tags, line numbers, equipment IDs and location codes as separate systems, IMF shows how these **can be linked through a common semantic structure**.

What this makes possible:

Consistent identification across engineering, procurement, construction and operations — and far stronger traceability when data moves between companies and systems.

2.10.2 Aporto Digital & Witboost – Empowering integration with governance at scale

This session showed how information **can stay connected** from early requirements through design, procurement, construction, operations and decommissioning.

Requirements, products, delivered equipment and operational context were presented as **one continuous digital chain** rather than disconnected phase handovers.

What this makes possible:

Less information loss between phases, fewer handover errors, and a much stronger link between engineering intent and operational reality.

2.10.3 PCA & DNV – IDO & OBI: When Standards Become Machine-Readable

This session showed how traditional engineering standards can be expressed as **machine-readable ontologies**, making it possible for software to interpret, validate and apply standards automatically – not just humans reading documents.

With PCA as **Maintenance Agency for IDO (part 3) and the coming SDO (part 100) within OBI**, long-term governance and trusted evolution of these digital standards are also secured.

What this makes possible:

Automated validation, consistent interpretation of standards across tools and companies, and true semantic interoperability.

2.10.4 Aspect Systems – From Requirements to Recycling: Using a IMF based Digital Thread

Aspect System demonstrated how **structured functional requirements can be digitally connected to real, installed equipment across the full lifecycle**.

By linking process functions, environmental conditions, control, power, and physical products into one continuous model, they showed how **traceability, safe modification, and lifecycle control become built-in – not added later**.

Message: If assets are to operate safely for decades, information must be **structured, connected, and maintained as a living digital system – not as documents**.

2.10.5 DEXPI – DEXPI 2.0: From Drawings to Digital Engineering Truth

DEXPI 2.0 moves P&IDs from file-based diagrams to **structured, machine-readable engineering data**.

It enables true multi-vendor interoperability, automated validation, and reliable handover from engineering to operations.

Message: Without **standardized, structured engineering data at the source**, scalable digital execution downstream is impossible.

2.11 Awards and Close-Out

Webstep received the **Best Contribution Award** for challenging deeply rooted manual practices and showing what becomes possible when facility data is truly connected.

The closing message was clear and shared across the room:

*The technology is no longer the bottleneck.
The real question is how fast the industry dares to change.*

DISC Show & Tell 2025 closed with strong momentum toward **DISC 2026** — and a shared understanding that what was demonstrated as *possible* now must move into **real implementation across the value chain**.

And exactly that will be the focus of next years DISC Show & Tell 2026 – showcasing real-world implementations based on the DISC framework and PCA platform.