



Case Study: Sekisui Specialty Chemicals

How Sekisui Obtained Order Visibility

"We built Unity Central to solve a specific problem: our sales team needed order visibility but didn't have SAP access. Instead of fielding constant status requests, we now give them a consolidated view where all order documents auto-link. The system flags discrepancies automatically - quantity mismatches, orders stuck in certain stages - so I can focus on exception handling rather than routine inquiries. Sales gets faster answers, customers get better service, and my order management team can work proactively instead of reactively."

— **Kristina Carstarphen, Order Management, Sekisui Specialty Chemicals**

The Problem

Sekisui processes hundreds of supply chain documents every week.

Every order generates its own paper trail: order confirmations, bills of lading, certificates of analysis, invoices. Someone had to manually match these documents to the right orders. Documents lived in different systems - SAP, warehouse software, email inboxes, financial systems.

When sales needed to check an order, they'd ask Order Management. When a customer called asking "where's my shipment?", sales couldn't answer. They'd email Kristina Carstarphen's team.

Kristina's team would log into SAP, pull up the order, check the warehouse system for the bill of lading, look for the invoice, cross-reference everything, and send back an update.

Every question meant 5-10 minutes of manual work. Multiply that by dozens of inquiries per day.

And it wasn't just sales asking. Finance needed to verify invoices matched shipments. Logistics needed to track delays. Everyone needed the same information, scattered across different places.

What We Built

Unity Central reads supply chain documents automatically and connects them.

The AI scans incoming documents - order confirmations, bills of lading, COAs, invoices - and extracts what matters: order numbers, quantities, dates, customer names, line items.

Then it links everything together by order number. When order 90723 gets a new document, the system reads it, figures out what it is, and adds it to that order's timeline.

No one has to manually file documents. No one has to go hunting across systems to piece together an order's status.

The system also watches for problems. If a bill of lading shows 100 units shipped but the invoice shows 95 units, it flags the mismatch. If an order sits too long without moving forward, it flags that too.

Kristina can set rules based on how her business actually works. Asset orders get different treatment than regular orders. Certain products have acceptable variance thresholds. The system learns these patterns and applies them automatically.

The Technology

Unity Central uses a patented approach to process documents and track workflows.

The system builds two models: the generic and the instance. The generic model is the ideal flow - what should happen in a perfect order. Order confirmation, shipment, COA, invoice. Each step in order, with expected timeframes.

The instance model is what actually happens. Order 90723 gets confirmed. Then shipped three days early. Then the COA is delayed. Then invoiced. Every real order is an instance of the generic flow.

By comparing generic to instance, the system knows when something is normal variation (shipped three days early - fine) versus a real problem (COA delayed two weeks - flag it). This is how the AI gets smarter over time. More instances mean better understanding of what normal looks like.

This approach is covered by multiple patents. It's not just document OCR. It's pattern recognition across thousands of order instances to understand how supply chains actually work.

Building Enterprise Memory

Every order processed becomes institutional knowledge.

When Kristina sets a rule or the system learns a pattern, it stays. When an experienced employee leaves, their expertise doesn't. The system remembers.

But here's what gets interesting: What happens when you aggregate thousands of order chains? When you can see patterns across customers, products, carriers, timeframes?

Strategy suddenly has data they've never had before. Which customers consistently cause exceptions? Which products have the tightest tolerances? Where do delays actually come from?

And this is just supply chain. The same approach works anywhere documents flow through a business process.

The value streams are still emerging. Some we can predict. Most we haven't imagined yet.

How It Started

We focused on one department first: sales.

Sales had the most visible pain. Customers calling, sales unable to answer, constant back-and-forth with Order Management.

We started with four document types and went from there:

- Order confirmations
- Bills of lading
- Certificates of analysis
- Invoices

Sales started using it. They could pull up any order and see the full timeline. When a customer called, they had answers.

Then Order Management started using it. Instead of responding to "where is order 90723?", Kristina's team could focus on the flagged exceptions - the orders that actually had problems.

What Changed

Sales stopped waiting for answers. When customers call, sales can see order status immediately. No email to Order Management needed.

Order Management stopped playing middleman. Kristina's team shifted from answering routine questions to fixing actual problems. The system flags the exceptions that need attention.

Problems get caught early. A quantity mismatch shows up right away, before it becomes a billing dispute with finance. An order stuck in one stage gets flagged before the customer starts calling.

The AI gets smarter over time. As the system processes more documents, it learns patterns. It recognizes different document formats. It handles exceptions better. Kristina's rules accumulate, making the system more useful with each order processed.

Who Benefits

Right now, sales and Order Management use Unity Central every day.

But the same document automation could help:

- **Finance** - verify invoices match shipments without manual cross-checking
- **Logistics** - track shipment timing and carrier performance
- **Customer service** - answer customer inquiries without escalating to other teams
- **Procurement** - monitor supplier delivery performance
- **Quality** - track COA generation and approval timelines

The documents are already there. The AI already reads them. Adding users is just a matter of showing them what's already available.

What's Next

The platform continues to evolve based on customer needs - and toward a bigger vision of enterprise memory.

For Sekisui, the next phase adds freight forwarder integration - container bookings, vessel schedules, international shipment tracking. After that, warehouse documents like delivery notes and carrier notifications.

The broader roadmap includes customer-facing portals (let customers check their own order status), multi-language support for global operations, and integration with more ERP systems beyond SAP.

But the real power comes from scale. As more customers use Unity Central, the data set grows & chain appropriately across industries. Patterns from chemical manufacturing inform pharmaceutical workflows. Logistics exceptions in one company help predict problems in another.

The generic/instance modeling gets more powerful with each customer, each department, each process added. More data means better pattern recognition. Better patterns mean earlier exception detection.

We're building toward enterprise memory at scale - where institutional knowledge doesn't just stay within one company, but informs best practices across entire industries. While keeping each customer's data completely private, the patterns learned can help everyone become smarter, faster.

Why It Works

AI handles the grunt work. No one manually files documents or matches them to orders anymore. The system does it.

It's built on documents you already have. No new data entry. No change to existing workflows. Just pull in the documents your business already generates.

It gets smarter with every order. The patented generic/instance modeling means the system learns from actual order patterns. After processing fifty orders, it knows what normal looks like for your business.

It starts small and grows. We didn't try to automate everything at once. Four document types. One department. Then expand.

Experts train the system, not the other way around. Kristina knows how her orders work. She sets the rules. The AI applies them consistently to every order.

Everyone uses the same data. Sales sees the same information as Order Management sees the same information as Finance. No more version conflicts or stale data.

Complete audit trail. Every action is logged. Who flagged an exception, who resolved it, when documents were received. Critical for compliance and internal audits.

It's defensible technology. Multiple patents cover the approach. This isn't off-the-shelf document OCR. It's pattern recognition built specifically for supply chain workflows.

About Sekisui Specialty Chemicals

Sekisui Specialty Chemicals makes polymers and specialty chemicals for automotive, construction, and infrastructure industries.

About Unity Central

Unity Central is building enterprise memory for regulated industries. The platform uses AI and patented workflow modeling (covered by multiple U.S. patents) to automate complex document processes, learn from actual process patterns, and capture institutional knowledge that makes companies more resilient over time. The generic/instance modeling approach flags exceptions, maintains audit trails, and continuously improves - critical for compliance and operational excellence.

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