



SOLVENTUM | MINDSET | SAP: CONNECT DAYS FOR AI + DATA LEADERS

Solventum's Signavio to Joule AI Agent Journey on the SAP Business AI Platform

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Solventum's ERP Journey: From 3M to Today

- Current State of S/4
- Future State: Life After Separation
- Agent Journey & Automation

ERP Journey: Technology Stack and Our Story

- **Signavio**
 - By using Signavio, we were able to read what the ERP says about our orders and where the process actually breaks
- **Build Work Zone**
 - One stop shop for logging in and accessing your applications and dashboard
- **Joule & Joule Studio**
 - After identifying the process break and working through design thinking, these were identified as what we wanted to use to build AI with
- **BTP**
 - Where we are building anything that S/4 does not do out of the box
 - This separation is the reason we can build and test an agent without touching the system that takes the order

69 hours

Number of hours orders sat blocked before anyone touched them; measured, with Signavio

The Old Way: Meet three people at Solventum



THE CSR

One of ~200 customer service reps. Started every day re-checking the same blocked orders by hand.



THE ANALYST

Credit and pricing blocks landed in a queue that only grew. Every pricing change, another manual touch.



THE ORDER LEADER

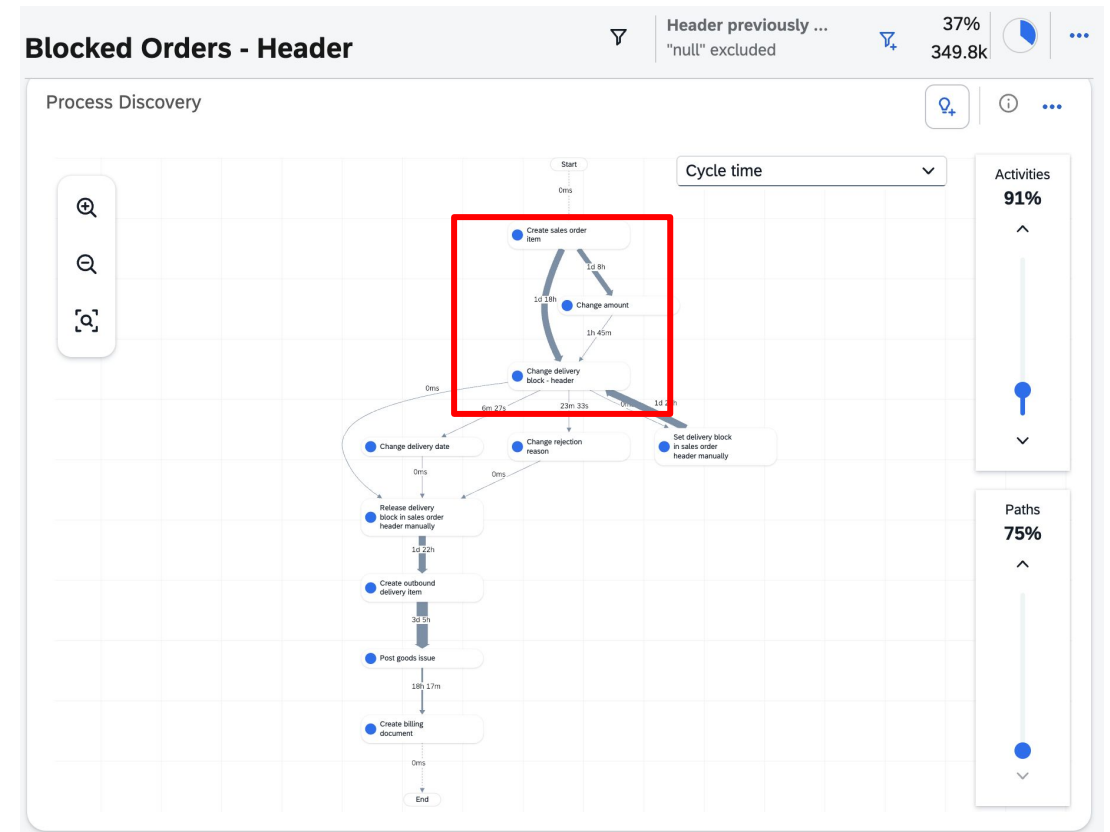
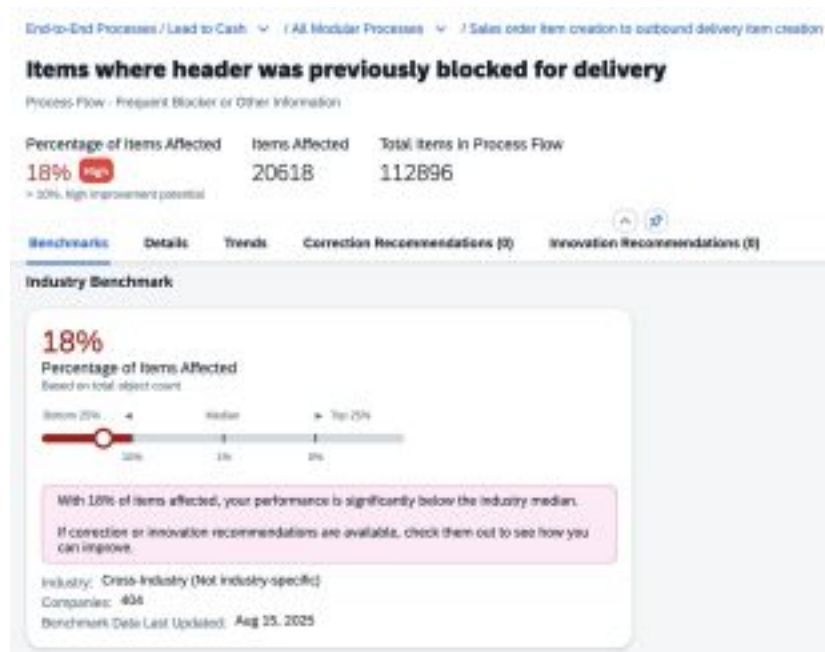
Couldn't answer where is this order and why without three systems and a phone call.

Most enterprises pick AI use cases by intuition

AI is only as good as its access to your processes and data. **So Solventum measured first.**

Measuring First: Signavio process mining, not a workshop vote

Phase 1 mapped order-to-cash against industry benchmarks, where the data pointed at **blocked orders as the top improvement candidate**



What We Found: Blocked orders were the bottleneck

Order blocks, credit blocks, pricing changes blocked

- forced manual rework across roughly 200 CSRs, 18% of orders

Cycle-time impact

- 69 hours to clear a blocked order versus 46 standard, about 50% longer

Benchmarked, not assumed

- gap vs industry standard quantified in Signavio

Tie back to the three people: this was their day.

Blueprint: Designed with the people who do the work

4 weeks

of design sessions with the CSRs themselves

The people you met earlier helped design what came next. Adoption starts at design, not at go-live.

Build One: The Consolidated Blocked Worklist

- One SAP Build app replacing swivel-chair triage
- CAP and Fiori on BTP, accessed by a tile in Build Work Zone

Manage Sales Order Blocks

< SAP OTC Dashboard

Search

© 🔔 6 👤

🔗

Standard

Search

Sales Order:

Sold To:

Material:

PO Type:

Sales Document Type:

Issue Type:

Person Responsible:

YG Group:

Sales Org:

Division:

Customer Group:

Priority Level:

Go Adapt Filters (1)

Sales Order Blocks (1200)

Collapse All Expand All Remove Delivery Blocks

	Sales Orders	Bk Type	Block	CSR Notes	Customer	Net Amount	Age	Priority
☐	▼ 500009084		M02, Incomp, 97, 99		Hope Hospital (100000037)	1,000,000 EUR	2 days	High
☐	Header	Delivery	M02 - Mat Not Extended	Longtext description goes here...	Hope Hospital (100000037)	12,897.00 EUR	2 days	High
☐	Header	Incomp		Longtext description goes here...	Hope Hospital (100000037)	12,897.00 EUR	2 days	High
☐	Line 20	Delivery	M02 - Mat Not Extended	Longtext description goes here...	Hope Hospital (100000037)	12,897.00 EUR	2 days	High
☐	Line 70	Delivery	97 - WH No Pick	Longtext description goes here...	Hope Hospital (100000037)	1,000,000 EUR	2 days	High
☐	Line 130	Delivery	99 - CSR Review	Longtext description goes here...	Hope Hospital (100000037)	12,897.00 EUR	2 days	High
☐	▼ 500009085		97, {Billing}, Auth		Vet Dental Co (100000054)	12,897.00 EUR	4 hrs	Med
☐	Header	Delivery	97 - WH No Pick	Longtext description goes here...	Vet Dental Co (100000054)	1,000,000 EUR	4 hrs	Med
☐	Line 70	Billing	{Billing block}	Longtext description goes here...	Vet Dental Co (100000054)	12,897.00 EUR	4 hrs	Med
☐	Line 80	Credit	Authorization	Longtext description goes here...	Vet Dental Co (100000054)	12,897.00 EUR	20 min	Med
☐	▼ 500009086		97, 99, Temp Rejection		Heartland Health (100000043)	1,000,000 EUR	20 min	Med
☐	Header	Delivery	97 - WH No Pick	Longtext description goes here...	Heartland Health (100000043)	1,000,000 EUR	20 min	Low
☐	Line 40	Delivery	99 - CSR Review	Longtext description goes here...	Heartland Health (100000043)	12,897.00 EUR	20 min	Low
☐	Line 50	Temp Rej	{Rejection Code}	Longtext description goes here...	Heartland Health (100000043)	12,897.00 EUR	1 day	Low
☐	▼ 500008099		99		Vet Dental Co (100000054)	12,897.00 EUR	1 day	Low

Build Two: Joule Agents, aimed at measured gaps

1

SIGNAVIO FINDING

Each agent starts from a mined bottleneck, not a hunch.

2

THREE JOULE AGENTS

Fulfillment Status, Customer Material Info Record, Phase In and Phase Out built as part of the factory, deploying in Solventum's own BTP.

3

GOVERNED GATEWAY

Agents reason against live business data through a governed agent gateway. Nothing copied.

Joule Agents

Fulfillment Status

This agent utilizes order information and delivery information agents concurrently to provide a comprehensive view of the status of sales orders

Customer Material Info Record

Provides information on customer material information records and can create and maintain records as well

Phase in Phase Out

This agent utilizes the Order Information, Customer Material Info Records, Material Information Agents; it will confirm that the replacement material is active and sellable, identify sales orders and CMIR records that require updates and perform the required update. If the agent encounters an order that is incomplete or has incorrect pricing, it will block the order from processing; once completed, summary of changes will be produced

Current and future planned agents that begin the process of changing the CSR experience and productivity, all results of the Design Thinking Workshop

The Platform: SAP Business AI stack that makes it repeatable

CONTEXT

SAP Signavio

Process truth: where the days were lost,
measured and verified

BUILD

BTP + Joule

Apps and agents into the gaps the
mining found

GOVERN

Agent gateway

Identity-gated, logged, live data only.
Data engineering's non-negotiable.

The New Way: Same People, Same Titles, New Approach



THE CSR

Works the exceptions the worklist and agents surface. No more morning sweep.



THE ANALYST

Her block queue arrives triaged before she opens it. (Future)



THE ORDER LEADER

Asks Joule where an order is and why. Gets a cited answer in under a minute.

What it takes to Operationalize Joule Agents

Establish the technical foundation

- Engage Security and Identity teams from day one
- Define authentication and access architecture early
- Validate platform, integration, and environment readiness upfront
- Establish intake, governance, and prioritization processes

Answer the operating model questions

- **Readiness:** Is the organization prepared to deploy, support, and scale agents?
- **Demand:** How will the organization create demand and prioritize opportunities?
Proactively “feed the funnel” vs waiting for submitted requests?
- **Resources:** Which business, IT, security, architecture, and support resources need to be involved?
- **Ownership:** Who owns each agent from idea through deployment and ongoing support?
- **Value:** How will agent outcomes and business value be measured?