

Unlocking AI impact in Aerospace & Defence: from insight to action



delaware



introduction



Meet your speakers



Nathan van Lombeek

Senior Manager & Solution Lead,
SAP Platform Development



Sara Gevelle

IVS Make Sales



Nathan Bijens

Founder, Scrydon

delaware



global footprint of delaware office locations

+5000 professionals

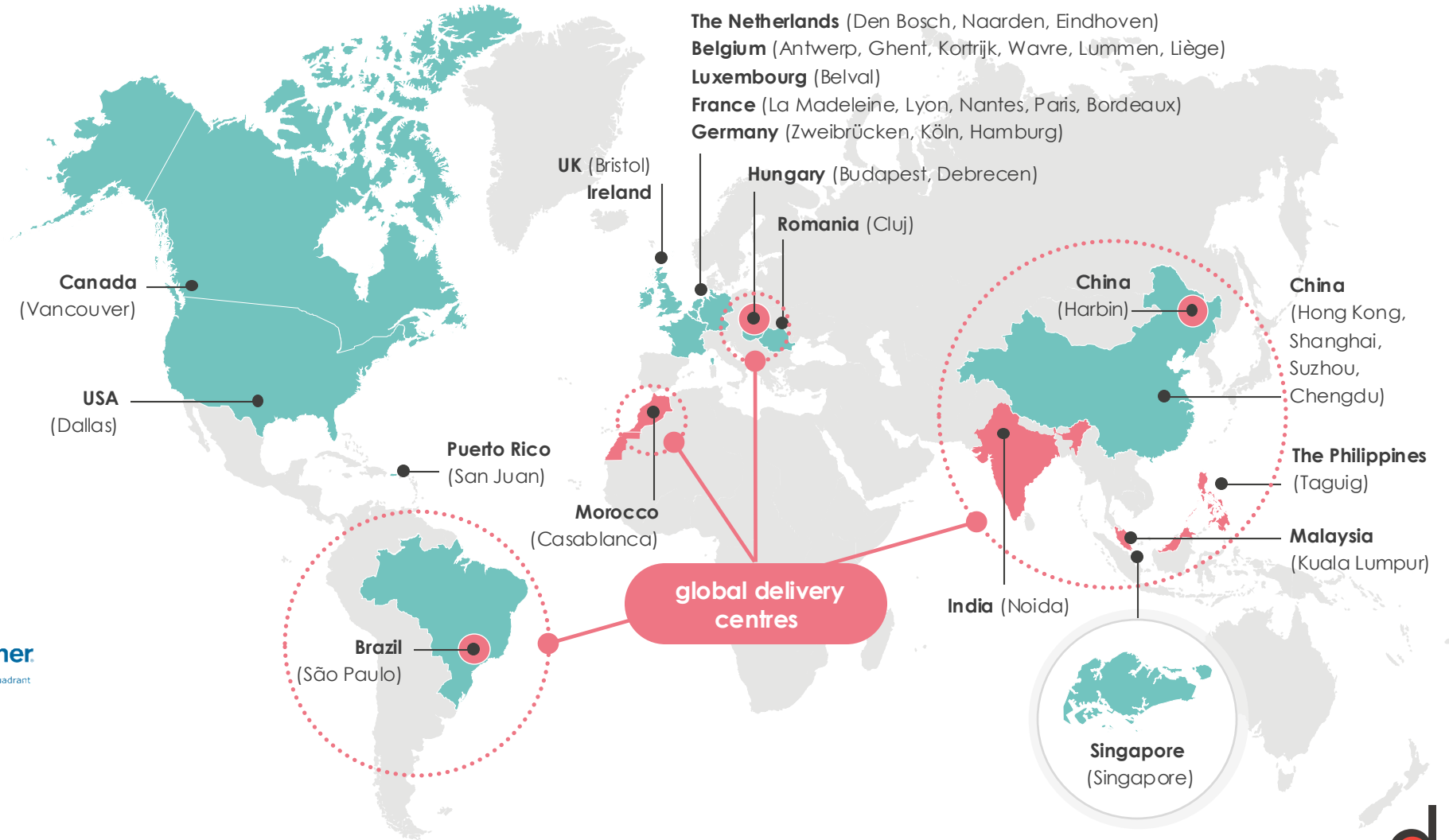
37 offices in

19 countries

global delivery network



our partner ecosystem



Most organisations have *great people*,
broken *processes*, and *data* they can't use.

We fix two out of three. Deliberately.



SCRYDON



2

what we see in the market

Market insights

Operating environment

- Supply chain disruption persists, tier 2/3 fragility, long-lead components and reshoring pressure squeeze throughput
- OEM cost compression, primes push price-downs while demanding higher quality and on-time delivery
- Talent shortage in engineering, cyber and skilled production is the binding constraint

Regulation & sovereignty

- European digital sovereignty is now a procurement criterion, data, AI and cloud must stay in European jurisdiction
- Compliance load is compounding, ITAR, EU Dual-Use, NIS2, DORA, CSRD and the AI Act layer onto AS/EN 9100
- Defence spending tailwind, NATO and EDIS unlock demand; capacity is the bottleneck, not orders

Technology & AI

- Predictive maintenance and MRO modernisation deliver the clearest near-term ROI
- AI in finance and S&OP, scenario planning, forecasting and working-capital optimisation
- Automation, robotics and agentic AI move pilot-to-production where governance and data foundations are in place

Strategic implication: winners treat AI, sovereignty and change as one transformation programme, adoption, not technology, decides value capture



delaware has deep experience in A&D

Over 100 Clients in Aerospace & Defense / Complex Manufacturing and Related Services



sap sapphire 2026 keynote.

“

SAP is becoming a Business AI company.

Answering Christian Klein's framing question on the keynote stage:

“will SAP still be a software company in the future?”

what every vendor is selling.



waterline

the technical depth a platform needs.



the business capabilities it must mature.



this is what a business ai platform is for.

What a business AI platform actually is.

Five building blocks every captain should know how to read.

External tools

- MCP servers
- APIs
- Databases
- SaaS apps
- Code repos
- Internal systems

what the platform plugs into.

1

Memory & Data *the rules the AI always knows*

Architecture rules · naming conventions · what 'good' looks like

why it matters. Without it, the AI starts from zero on every task.

2

Skills *specific things the AI knows how to do*

Modular knowledge chunks, loaded on demand, per task

why it matters. Lets you add expertise without retraining anything.

3

Hooks *automatic guardrails — not AI*

Deterministic rules that fire on events. Block. Notify. Lint.

why it matters. Stops AI mistakes from becoming business mistakes.

4

Agents *specialized AI workers with their own scope*

Separate AI instances · own context · own tools · own permissions

why it matters. One AI doing everything fails. Specialists succeed.

5

Plugins *how capabilities get shared*

Bundles of skills + agents + hooks. One-click install.

why it matters. Every team rebuilding from scratch is waste.

Agent teams

- Parallel execution
- Message passing
- Lead orchestration
- Shared permissions
- Human in the seat

how multiple agents coordinate.

Memory sets context.

Skills provide expertise.

Hooks enforce quality.

Agents delegate work.

Plugins distribute it.

What might it look like to run AI across both public and sensitive networks?

THE QUESTION

How do defence organisations get value from AI without moving classified data — or duplicating effort across security domains?

A POSSIBLE SHAPE

An ontology spanning both networks; agents reasoning on shared meaning while sensitive data stays where it belongs.

WHAT WE'RE EXPLORING

Operating models, governance patterns and tooling that let one platform serve two security postures.

WHERE IT SHOWS UP

Public

Sensitive

Bridged

Sovereign

Themes we keep meeting in conversations with defence organisations.

WHAT WE'RE LEARNING



Two networks, one model

What does it take for one semantic layer to serve very different security domains?



Meaning travels, data doesn't

Insights and processes may be portable in ways the underlying classified data is not.



Sovereignty as a design choice

Where the platform runs, who governs it, and how it's assured become first-class questions.

Worth exploring: could the same platform support both your public-network workloads and your sensitive ones — without compromising either?



What might it look like to modernise a defence manufacturer that AI has so far passed by?

THE QUESTION

How does a defence manufacturer — held back from most AI workloads by regulation and data-access constraints — start catching up?

A POSSIBLE SHAPE

Start conversational — give people a safe assistant — then thread the organisation's own information into a shared cognitive layer.

WHAT WE'RE EXPLORING

A staged route from first chat use cases to an ontology connecting engineering, programmes and supply-chain data.

WHERE IT SHOWS UP

Chat

Grounded

Connected

Cognitive

A path we keep sketching with defence manufacturers who feel left behind by AI.

WHAT WE'RE LEARNING



Start with a conversation

A governed chat assistant inside the perimeter — AI for daily work without crossing a compliance line.



Ground it in your own information

Connect documents, specifications and programme records so answers reflect the organisation, not the open web.



Towards a cognitive enterprise

An ontology spanning, programmes and supply chain — so agents can reason across the business, not just one silo.

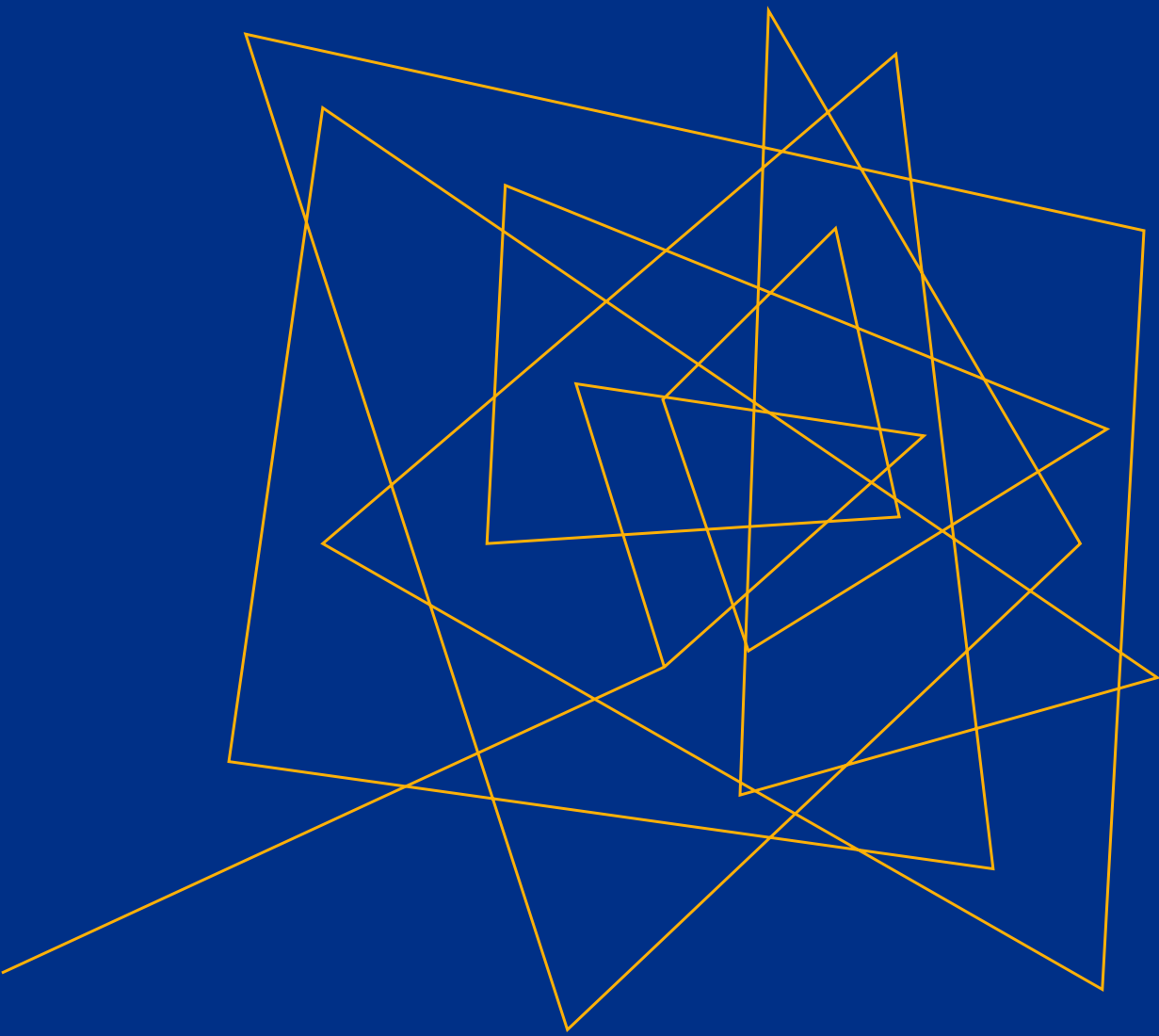
Worth exploring: if regulation has kept AI off your shop floor and back office, where could a governed conversation start tomorrow?





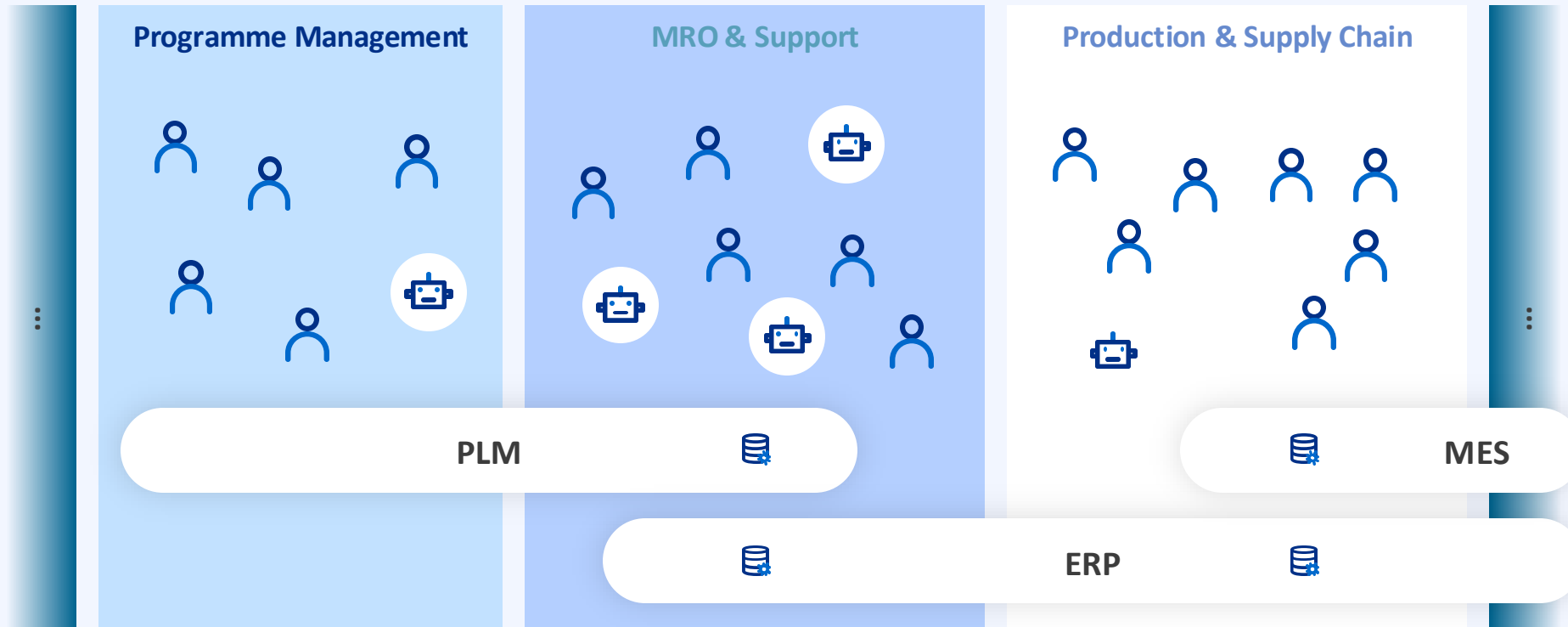
how we can help





THE COGNITIVE ENTERPRISE

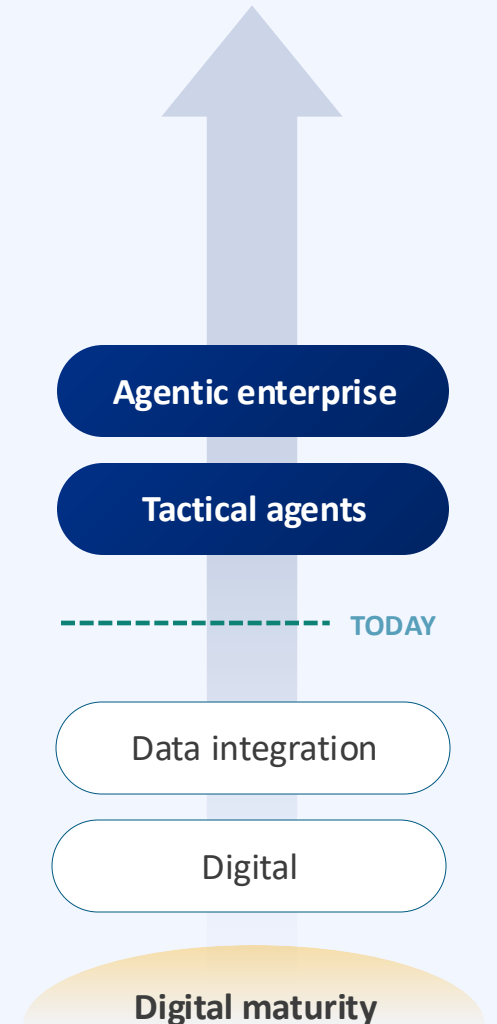
PROCESSES ARE NOT CAPTURED BY WORKFLOWS



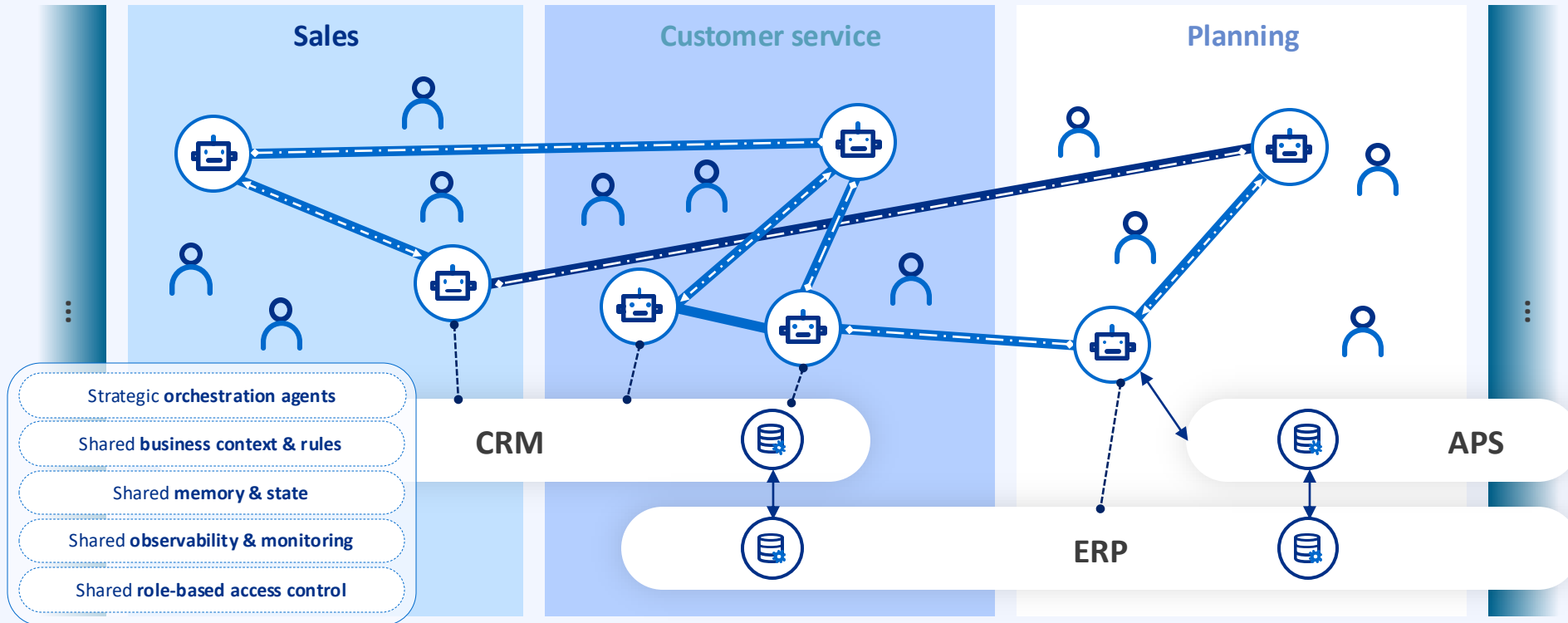
Legend

- employee
- tactical agent
- Business application / platform
- Data integration

Modern integration (e.g., API)
MCP (Model context protocol)
A2A (Agent-to-agent)

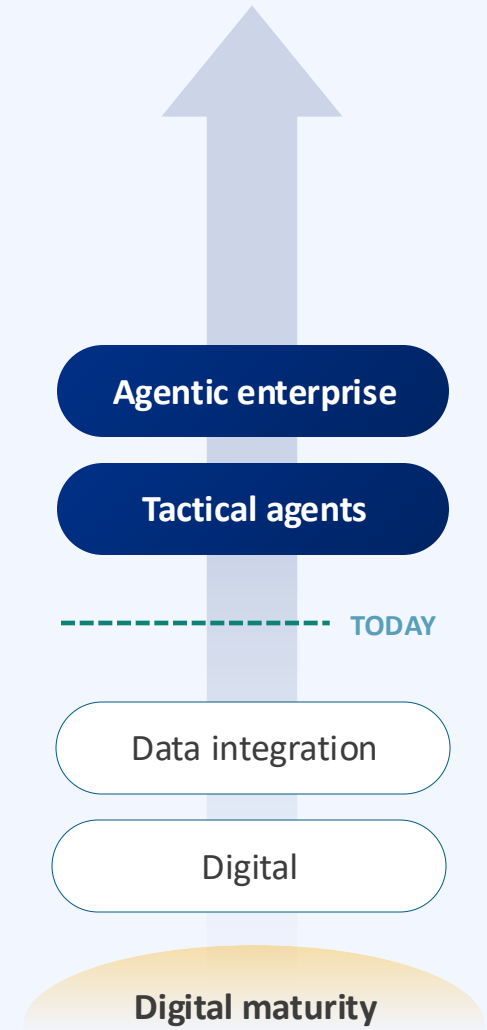


SCALE - WHEN YOU CREATE MULTIPLE TACTICAL AI AGENTS, THE NEED FOR A STRATEGIC AI LAYER RISES



Legend

- employee
- tactical agent
- Business application / platform
- Data integration
- Modern integration (e.g., API)
MCP (Model context protocol)
A2A (Agent-to-agent)



An ontology-based cognitive enterprise is the foundation for an AI operating system.

COGNITIVE ENTERPRISE

Humans + AI agents acting on shared meaning, with decisions and workflows that learn and improve continuously

AI OPERATING SYSTEM

Agents, models and tools orchestrated over the ontology — reasoning, planning and acting across the enterprise.

ONTOLOGY — *the foundation*

A unified semantic model of entities, processes and rules — the single source of truth that binds data, people and AI.

BUILT FROM

Data

Processes

Knowledge

Expertise

Each layer compounds the one beneath it. Without the ontology, AI agents reason on noise; with it, they reason on the business.

So what: Build the ontology first. The AI OS — and every cognitive workflow above it — is only as intelligent as the semantic foundation it stands on.

WHY THIS MATTERS

10×

Faster decision cycles

Agents query a shared business model rather than stitching reports — answers in seconds, not days.

1

Single source of meaning

Every team, system and AI agent operates on the same definitions, eliminating reconciliation and silos.

∞

Compounding intelligence

Every workflow, decision and correction enriches the ontology — the enterprise gets smarter over time.

HUMAN + AI ORCHESTRATION

NEW CUSTOMER

- Sync CRM
- Verify ID

IN PROGRESS

- Create Profile
- Check Rules
- Approve

COMPLETED

- Provision
- Welcome

Kanban | BPMN | The AI OS for Humans & AI Agents to enable your processes

INSIGHTS

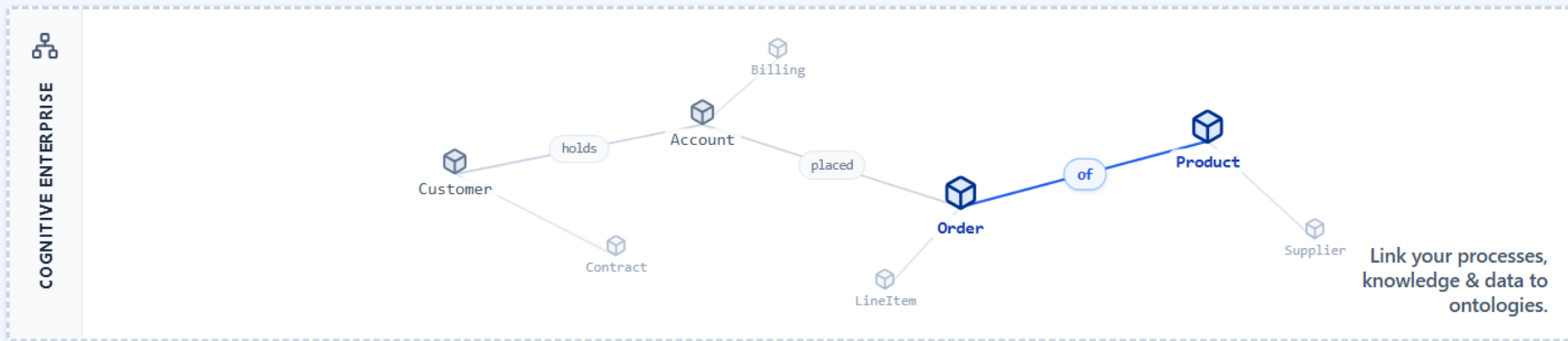
```
In [1]: import pandas as pd
df.plot.bar()
```

CORTEX

Conversational Intelligence: Natural language interface that seamlessly connects your ontology, multi-modal data, and sovereign workflows.

Build a supply chain disruption workflow

Linked **Supplier**. Ready for execution.



PERSONAL PRODUCTIVITY

3RD PARTY

LAKEHOUSE

Unified storage, structured compute, and secure multi-modal data processing.

Tables | Knowledge

AI AGENTS

Autonomous operatives with specialised skills executing tasks across systems.

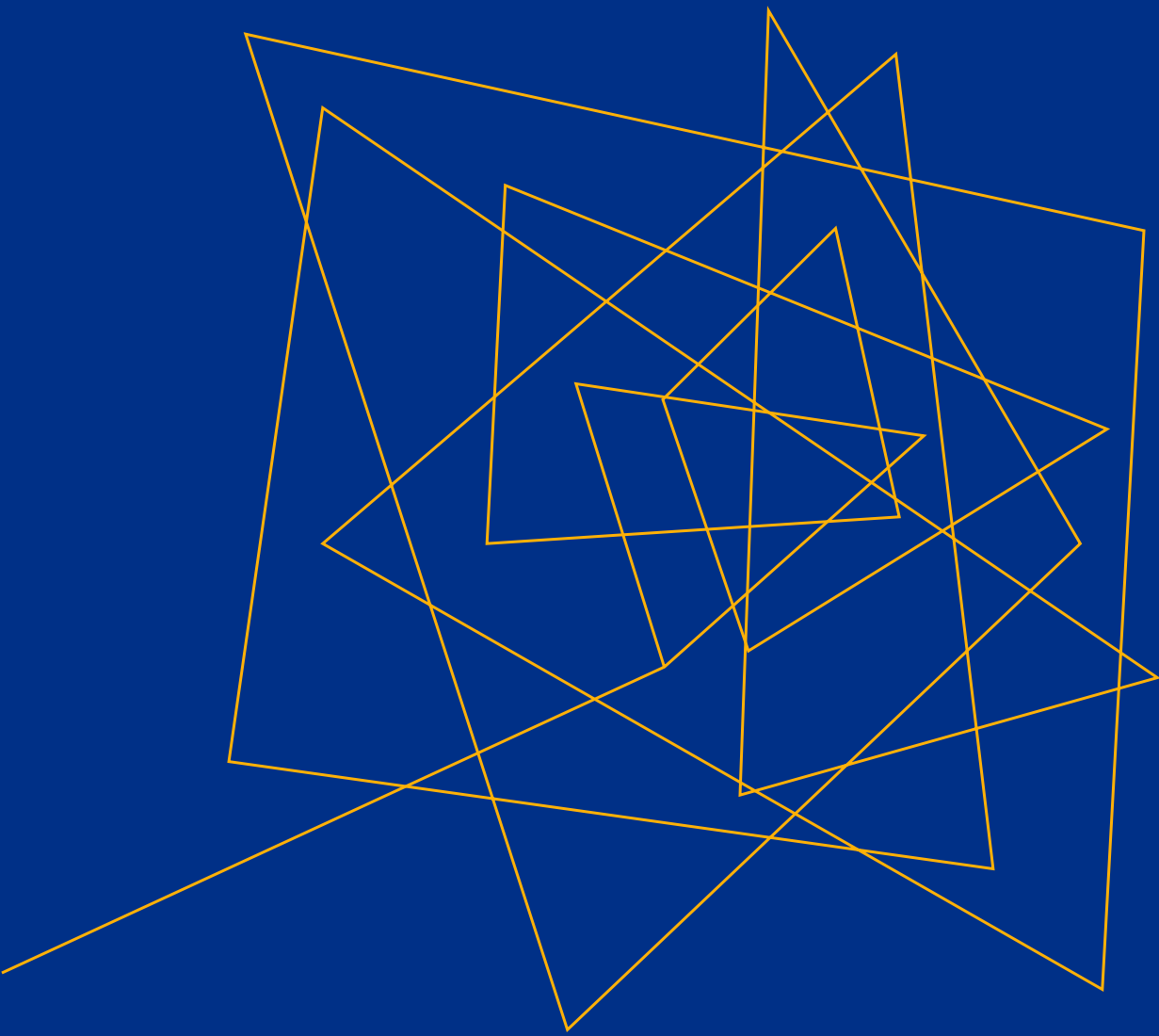
AI Workflows

INTEGRATIONS

Sovereign pipelines, federated APIs, and seamless connector meshes.

DATA SPACES

Secure domain federation, trusted data sharing, and cross-boundary intelligence.

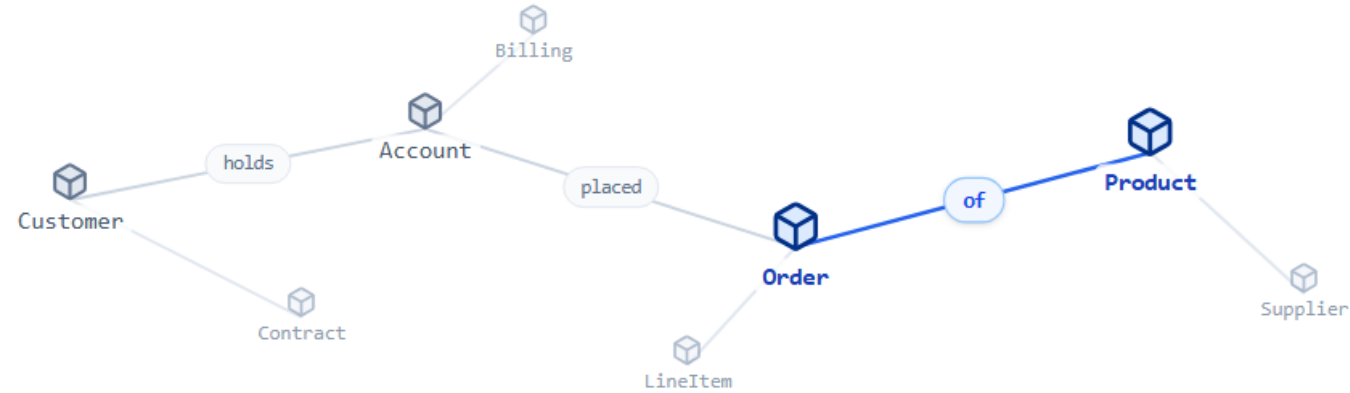


COGNITIVE ENTERPRISE: ONTOLOGY LAYER

ONTOLOGY: A SEMANTIC BACKBONE, NOT JUST ANOTHER SCHEMA

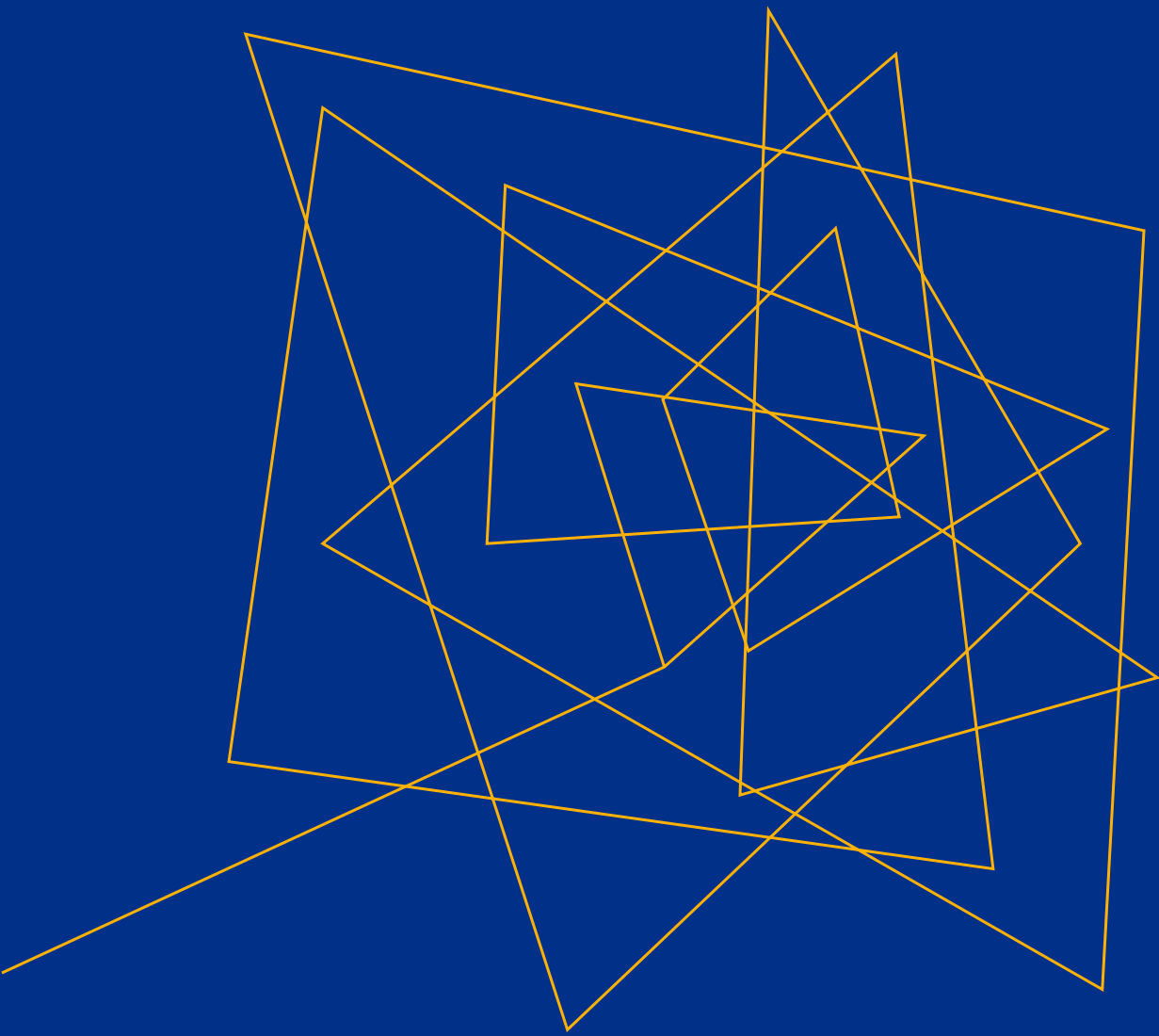


COGNITIVE ENTERPRISE



Link your processes,
knowledge & data to
ontologies.

- Defines the entities, relationships, and concepts of the operational environment in a shared, machine-readable model
- Every action — human, agent, or system — recorded as an ontologically-typed event
- Resolves the same vessel across radar, AIS, and OSINT into a single entity
- Humans and agents speak the same language across systems and domains



HUMAN+AI ORCHESTRATION



Human+AI Orchestration

ENTERPRISE PROCESS FLOWS

ENTERPRISE KNOWLEDGE

DISCOVER

Employee Capture intent

Tactical agent Analyze state

PREPARE

Data integration Synthesize data

REALIZE

Tactical agent Execute action

Employee Notify outcome

Coordinate the most complex processes across Systems, Agents and Humans.

Human + AI

- Coordinate the most complex processes
- Always with context, system-wide across Humans, Agents and Systems

Human + AI



Agentic enterprise



Tactical agents

LEGEND



employee



tactical agent



Business application / platform



Data integration

----- Modern integration (e.g., API) / A2A (Agent-to-agent)



Human+AI Orchestration

ENTERPRISE PROCESS FLOWS

ENTERPRISE KNOWLEDGE



Entities, relationships - every source resolves into it, every query reads from it, every action writes back. This is your [Enterprise Map](#).

Human + AI

- Coordinate the most complex processes
- Always with context, system-wide across Humans, Agents and Systems

Human + AI



Agentic enterprise



Tactical agents

LEGEND

employee

tactical agent

Business application / platform

Data integration

Modern integration (e.g., API) / A2A (Agent-to-agent)

ENTERPRISE PROCESS FLOWS

The screenshot shows a web interface for managing process flows. At the top, there's a header with 'CONTROL ROOM' and a 'DEVELOPMENT' dropdown. A sidebar on the left contains various icons. The main content area is titled 'Azure Cloud Adoption Framework' and is marked as a 'System template — read-only'. It features a 'CLONE' button in the top right.

Template Details

Name
Azure Cloud Adoption Framework

Description
Microsoft's Cloud Adoption Framework (CAF) for Azure provides proven guidance and best practices to accelerate your cloud journey. Covers 7 phases from initial strategy through sustained governance and management.

Methodology Family
Azure

Version
2.0.0

Published System

Knowledge Bases
Link knowledge bases to provide context for AI-powered actions.

- Demo Voice - Draghi
- test
- Test 2

Stages (7)

Strategy (Approval) 3 actions

Stage Name	Slug
Strategy	strategy

Description
Define business justification and expected outcomes. Document motivations, business outcomes, and the business case for cloud adoption.

Stage Type	Transition Mode
Sequential	Approval

Estimated Duration
2 weeks

Action Templates (3)

- Cloud adoption motivation document (Document) Required Manual
- Business outcomes documentation (Document) Required Manual
- Financial model and business case (Document) Required Manual

Plan (Approval) 4 actions

Ready (Approval) 4 actions

Adopt - Migrate (Approval) 4 actions

ENTERPRISE PROCESS FLOWS

Brabant Chocolatier NV — S/4HANA Migration In Progress + ADD TASK ...

SAP Activate (Demo) · 6 stages · 15 tasks Priority No grouping KANBAN LIST TRACKER

KNOWLEDGE

Discover
Completed

15 modules 165 actions 45 decisions 60 docs
15 files

- ✓ Financial Accounting (FI) FI 11/11
- ✓ Controlling (CO) CO 11/11
- ✓ Treasury & Cash Manage... TRM 11/11
- ✓ Materials Management (... MM 11/11
- ✓ Sales & Distribution (SD) SD 11/11
- ✓ Production Planning (PP) PP 11/11
- ✓ Quality Management (QM) QM 11/11
- ✓ Plant Maintenance (PM) PH 11/11

+ 7 more

Q-Gate ✓ 30 Jan

Prepare
Completed

15 modules 150 actions 15 decisions 90 docs
15 workflows

- ✓ Financial Accounting (FI) FI 10/10
- ✓ Controlling (CO) CO 10/10
- ✓ Treasury & Cash Manage... TRM 10/10
- ✓ Materials Management (... MM 10/10
- ✓ Sales & Distribution (SD) SD 10/10
- ✓ Production Planning (PP) PP 10/10
- ✓ Quality Management (QM) QM 10/10
- ✓ Plant Maintenance (PM) PH 10/10

+ 7 more

Q-Gate ✓ 27 Feb

Explore
Active

15 modules 168/180 actions 30 decisions 120 docs

- Financial Account...** Financial Accounti...
12/12 sarah-dupont
- Controlling (CO)** Controlling (CO)
12/12 sarah-dupont
- Treasury & Cash ...** Treasury & Cash ...
12/12 sarah-dupont
- Materials Manag...** Materials Manage...
12/12 jan-devos
- Sales & Distribut...** Sales & Distributio...
12/12 emma-vermeulen
- Production Plan...** Production Planni...
12/12 jan-devos
- Quality Manage...** Quality Managem...
12/12 jan-devos
- Plant Maintenanc...** Plant Maintenance...
12/12 nathalie-mertens
- Warehouse Man...** Warehouse Mana...
12/12 emma-vermeulen
- Data Migration** Data Migration
12/12 thomas-peeters
- Integration & Int...** Integration & Inter...
12/12 thomas-peeters
- Security & Auth...** Security & Authori...
12/12 jan-devos

Q-Gate pending

Realize
Active

13 modules 20/130 actions 26 docs

- Financial Account...** Financial Accounti...
3/10 sarah-dupont
- Controlling (CO)** Controlling (CO)
2/10 sarah-dupont
- Treasury & Cash ...** Treasury & Cash ...
1/10 sarah-dupont
- Materials Manag...** Materials Manage...
2/10 jan-devos
- Sales & Distribut...** Sales & Distributio...
2/10 emma-vermeulen
- Production Plan...** Production Planni...
1/10 jan-devos
- Quality Manage...** Quality Managem...
1/10 jan-devos
- Plant Maintenanc...** Plant Maintenance...
0/10 nathalie-mertens
- Warehouse Man...** Warehouse Mana...
1/10 emma-vermeulen
- Data Migration** Data Migration
2/10 thomas-peeters
- Integration & Int...** Integration & Inter...
2/10 thomas-peeters
- Security & Auth...** Security & Authori...
1/10 jan-devos

Q-Gate pending

Deploy
Not Started

Not yet started

Q-Gate scheduled

Run
Not Started

Not yet started

Q-Gate scheduled

ENTERPRISE PROCESS FLOWS

The screenshot displays a software interface with two main panels. The left panel is titled "Define project governance (roles, RACI, decision-making)" and contains a text area for writing or generating document content. Below the text area are buttons for "GENERATE WITH AI" and "SAVE". A "RECOMMENDATIONS" section below shows "No recommendations available." The right panel is titled "Financial Accounting (FI)" and shows a list of tasks. The tasks are categorized by type: Document (Doc), Check, Flow, and Approval. The tasks are listed in a table-like format with checkboxes and icons.

Document Pending Required

Define project governance (roles, RACI, decision-making)

Write or generate document content (Markdown supported)...

GENERATE WITH AI **SAVE**

RECOMMENDATIONS

No recommendations available.

Prepare

Financial Accounting (FI)

Active Role: finance-lead 2/21 actions **Explore** Ask Copilot

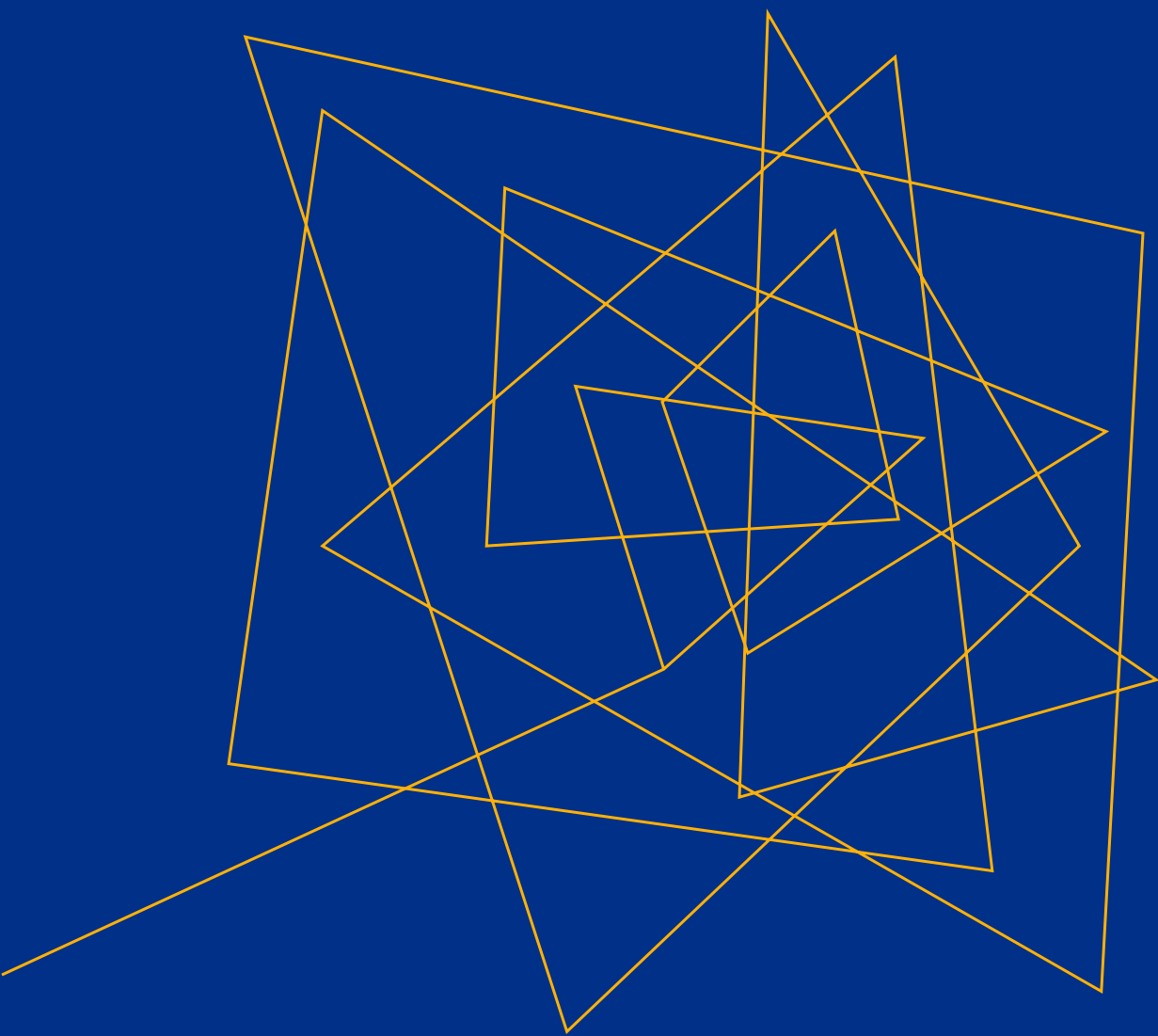
Linked Entity

Financial Accounting (FI) Sap Module financial-accounting-fi

Actions

Parallel — any order

- Doc** Create project charter and scope statement *
- Check** Identify strategic business & IT objectives *
- Check** Conduct SAP Discovery Assessment workshop *
- Doc** Define project governance (roles, RACI, decision-making) *
- Doc** Develop Work Breakdown Structure (WBS) *
- Doc** Map as-is business process landscape (SAP Signavio / BPI) *
- Doc** Create project management plan (schedule, budget, risk, comms) *
- Doc** Map as-is IT architecture (Enterprise Architecture Management) *
- Doc** Establish project standards (requirements, config, docs, security, testing, ch...
- Doc** Perform business scenario & solution mapping *
- Check** Check conversion readiness of current SAP ERP
- Flow** Provision sandbox / starter system with SAP Best Practices * Run
- Check** Set up IT infrastructure & access provisioning *
- Approval** Select implementation strategy (greenfield / brownfield / SDT) *
- Approval** Select deployment option (Cloud / On-Premise / Hybrid) *



INSIGHTS
FOR HUMANS
& MACHINES

SENSOR EXPLOSION

Data outpaces decisions

Radar, satellite, AIS, SIGINT, OSINT, FMV — volume and velocity exceed what staff can fuse manually under operational time pressure.

AI MATURITY

Foundation models can reason, plan, and act — turning fusion from a manual analyst task into an orchestrated multi-agent workflow.

OODA PRESSURE

Contested battlespaces compress the OODA loop. Sensor-to-decision time is now the differentiator.

WHY FUSION, WHY NOW

INSIGHTS

Insights

Turn raw data into actionable intelligence with an integrated analytics environment built for sovereign enterprise workloads. From notebook-driven exploration to production dashboards, the Insights layer makes your data legible and decision-ready.

- **Interactive notebooks:** Python and SQL environments with full access to your lakehouse data — no data movement required.
- **Visual dashboards:** Drag-and-drop reporting and live monitoring for operational metrics, KPIs, and trend analysis.
- **Agent-native analytics:** AI agents can query, summarise, and act on insights autonomously — closing the loop between analysis and action.
- **Governed access:** Row- and column-level security ensures analysts only see the data they are authorised to, with full audit logging.

```
1 m = ol.MapWidget()
2 m.add_click_interaction()

1 widget = mo.ui.anywidget(m)


1 widget

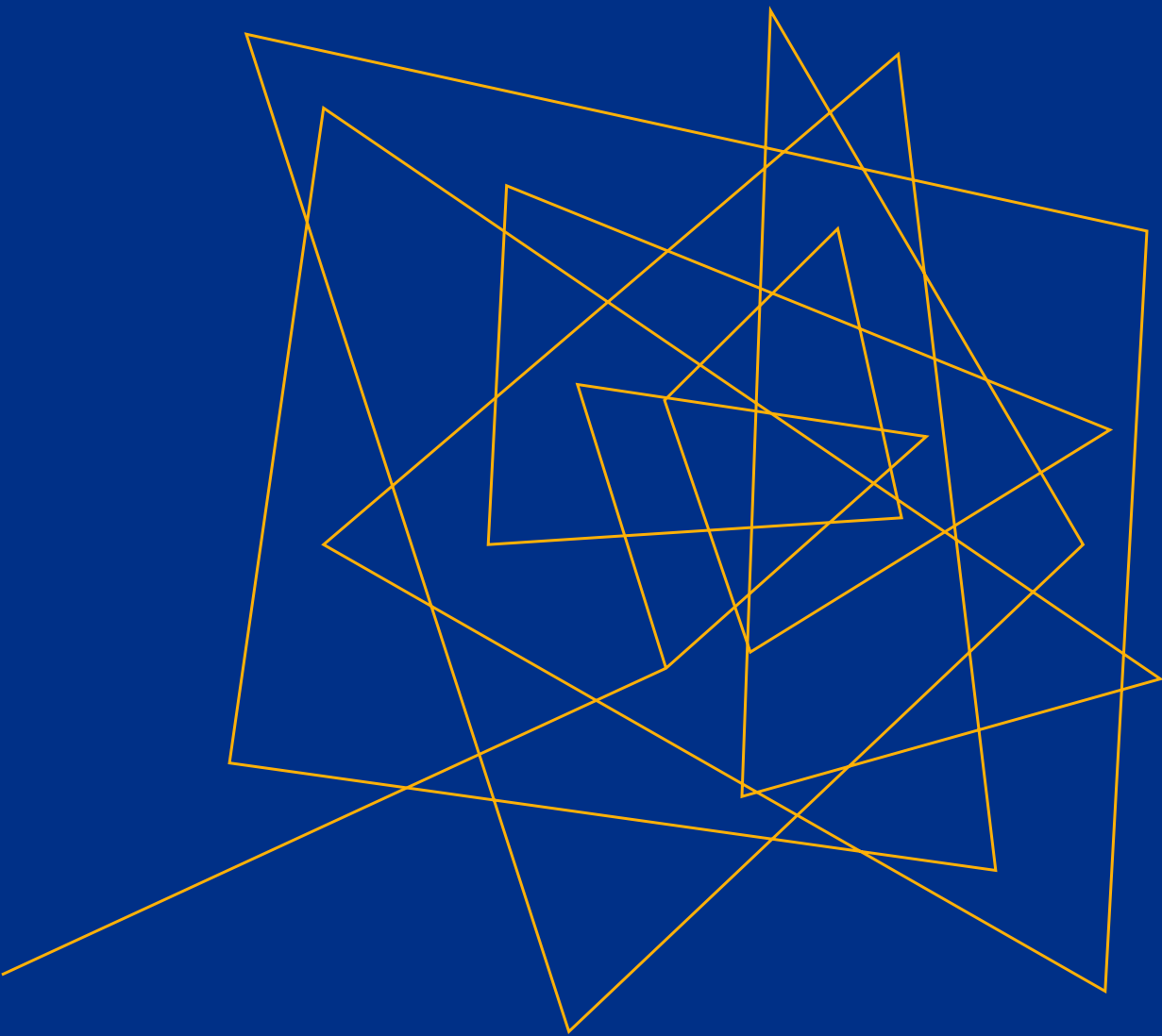
1 widget.value["view_state"]

{
  "center": [ 2 Items
    0: 10.738389607443583
    1: 49.976536231948046
  ]
  "projection": "EPSG:3857"
  "zoom": 5.1169201835807195
  "extent": [ 4 Items
    0: -10.831120307801587
    1: 44.7526719080894
    2: 31.507899612768757
    3: 64.60885528381779
  ]
}

1 widget.value["clicked"]

{
  "coordinate": [ 2 Items
    0: 3.225848862157766
    1: 50.67846305056705
  ]
}
```





CORTEX
CONVERSATIONAL
INTELLIGENCE

CORTEX Connected to ontology

Show me anomalies in Q2 supply chain data

Scanning Supplier ontology...

Found 3 anomalies. Supplier B delivery gap: +14 days.

Create a resolution workflow and escalate to procurement

Workflow created and assigned to procurement team.

Executed: Notify + Task #SC-421

What is our current contract coverage for Supplier B?

Contract SC-2024-B expires in 47 days. Coverage: 62%.

Queried: Knowledge Graph → Contract

Schedule a renewal reminder for 30 days out

Reminder scheduled. Owner notified.

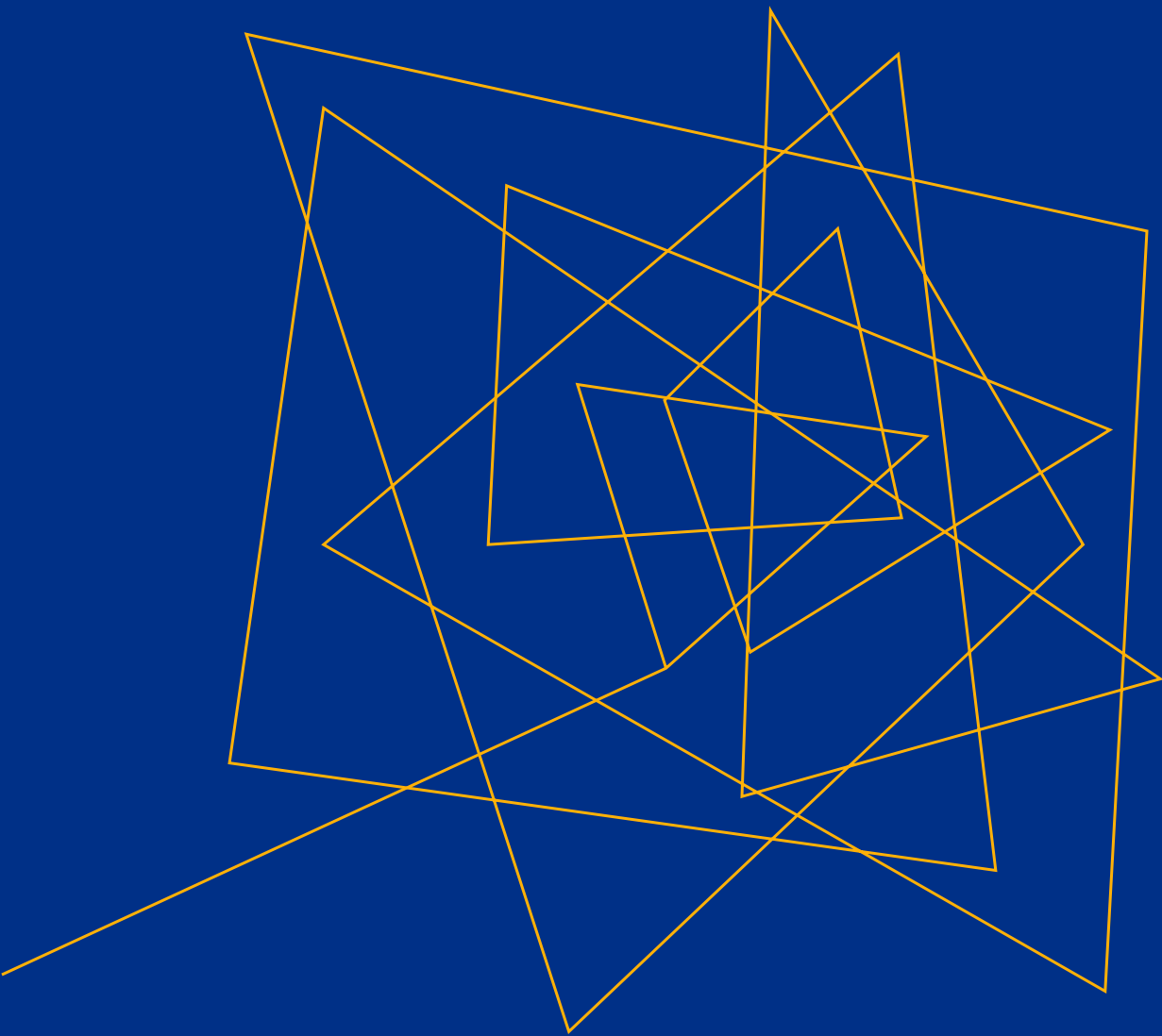
Created: Calendar event + Alert #SC-422

Ask anything about your enterprise... →

Cortex — Conversational Intelligence

Cortex is the natural language interface that bridges human conversation and the full capabilities of the platform. Speak to your data, trigger workflows, and interrogate your knowledge graph — all in plain language, with no technical barrier.

- **Ontology-aware:** Understands the structure of your enterprise knowledge graph, enabling precise, context-sensitive answers.
- **Workflow triggers:** Describe what you want to happen and Cortex routes the request to the right orchestration pipeline automatically.
- **Multi-modal input:** Accepts text, documents, and structured data, grounding responses in your actual enterprise data rather than generic LLM knowledge.
- **Audit trail:** Every conversation is logged, attributable, and reviewable — meeting compliance requirements for regulated industries.



THE
SOVEREIGNTY
GAP

THE SOVEREIGNTY CHALLENGE

Scrydon empowers European Enterprises, European Institutions & Defense organizations to achieve **Strategic Autonomy through secure, innovative Data & AI solutions.**

In a world where 80%¹ of Europe's digital infrastructure is imported and 70%² of AI models originate from the US, we provide a trusted European alternative. Our Agentic AI, Analytics, and Data Spaces platforms deliver compliant, secure solutions tailored for defense, regulated and critical industries.



OF EUROPE'S DIGITAL INFRASTRUCTURE IS IMPORTED



OF AI MODELS ORIGINATE FROM THE UNITED STATES








EU Cloud Sovereignty Assessment

Based on the [European Commission Cloud Sovereignty Framework](#), this assessment evaluates your organisation across 8 Sovereignty Objectives using a weighted SEAL-level scoring model.

16 questions · 8 objectives · SEAL levels 0–4

-  SOV-1: Strategic Sovereignty w15%
-  SOV-2: Legal & Jurisdictional Sovereignty w10%
-  SOV-3: Data & AI Sovereignty w10%
-  SOV-4: Operational Sovereignty w15%
-  SOV-5: Supply Chain Sovereignty w20%
-  SOV-6: Technology Sovereignty w15%
-  SOV-7: Security & Compliance Sovereignty w10%
-  SOV-8: Environmental Sustainability w5%

scrydon.com/sovereignty/score/cloud

Your Data. Your AI. Your Control.

Sovereignty is not a feature—it is the foundation. Every layer of our platform is designed so that you own your data, govern your AI, and retain the freedom to move.



Your Data

You decide where your data lives—EU data centre, private cloud, or on-premise. We never move, copy, or access it without your explicit instruction.

Full compliance with GDPR, the EU Data Act, and sector-specific regulations out of the box.



Your AI

Run open-weight models you can inspect, fine-tune, and own. No opaque API calls to third-party providers—your models stay under your roof.

Swap models freely: Mistral, LLaMA, or your own custom weights. Zero replatforming needed.



Your Control

Built on open source foundations and Kubernetes. Export your data, models, and pipelines at any time. No exit fees, no lock-in.

Auditable security: inspect the open source components, verify the safeguards, and understand how your data is handled.



4

conclusion

In summary

1 A Business AI platform is a must.

- Generic copilots aren't enough, enterprises need a platform that grounds AI in their own data, processes and rules.
- Lakehouse, ontologies, agents and governance are not optional layers, they are the platform.
- Sovereignty and control over data and models are becoming baseline requirements.

2 Scrydon & delaware are your partners to set it up.

- delaware brings the data foundation: Microsoft Fabric, Power BI, Copilot adoption and enterprise-scale delivery.
- Scrydon brings the Cognitive Enterprise stack: Cortex, ontologies, AI agents and sovereign foundations.
- Together: from data platform to AI agents in production, designed, governed and operated end-to-end.



Thank you for your time



we commit. we deliver.



delaware