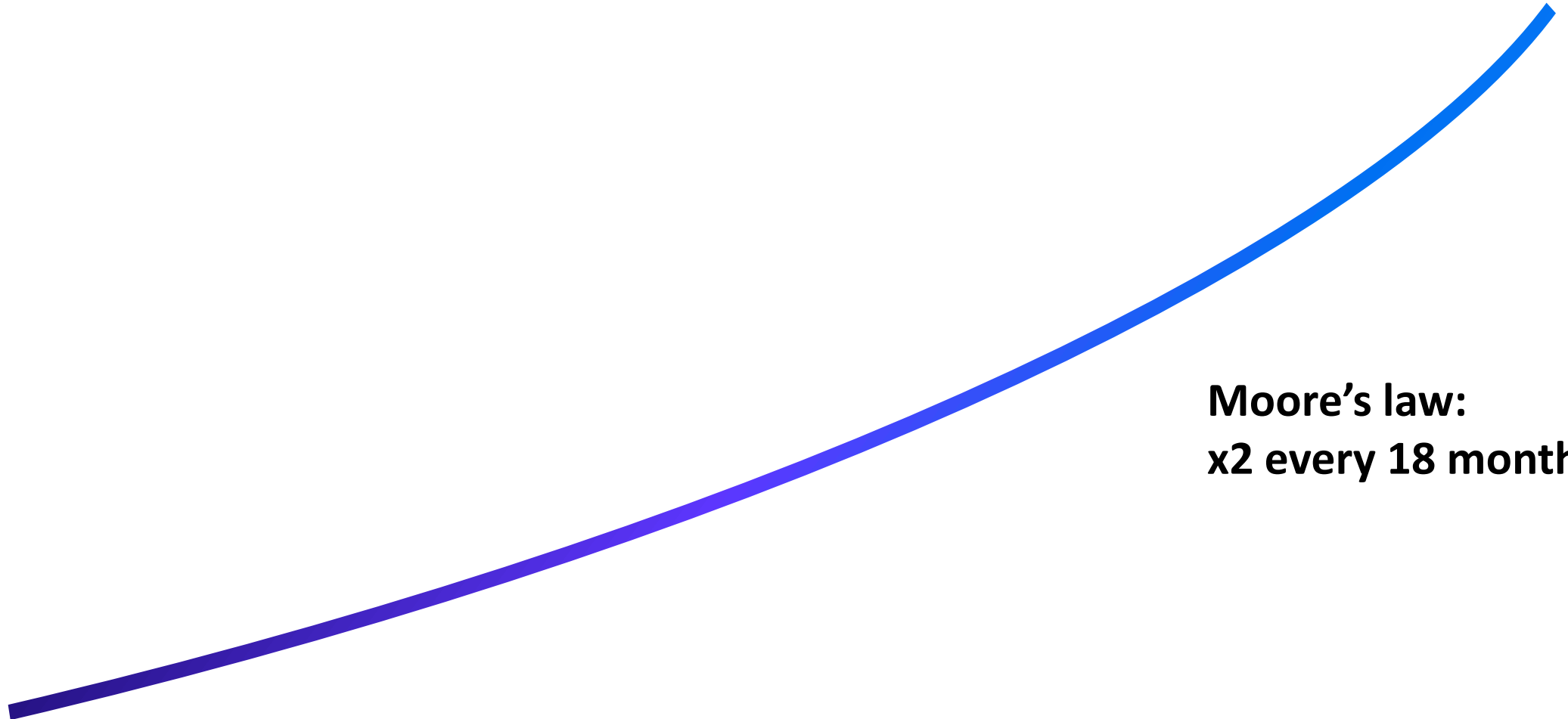


SAP Business AI: Today, Tomorrow, Beyond Tomorrow

Jesper Schleimann
AI Officer
SAP EMEA
10.12.2024

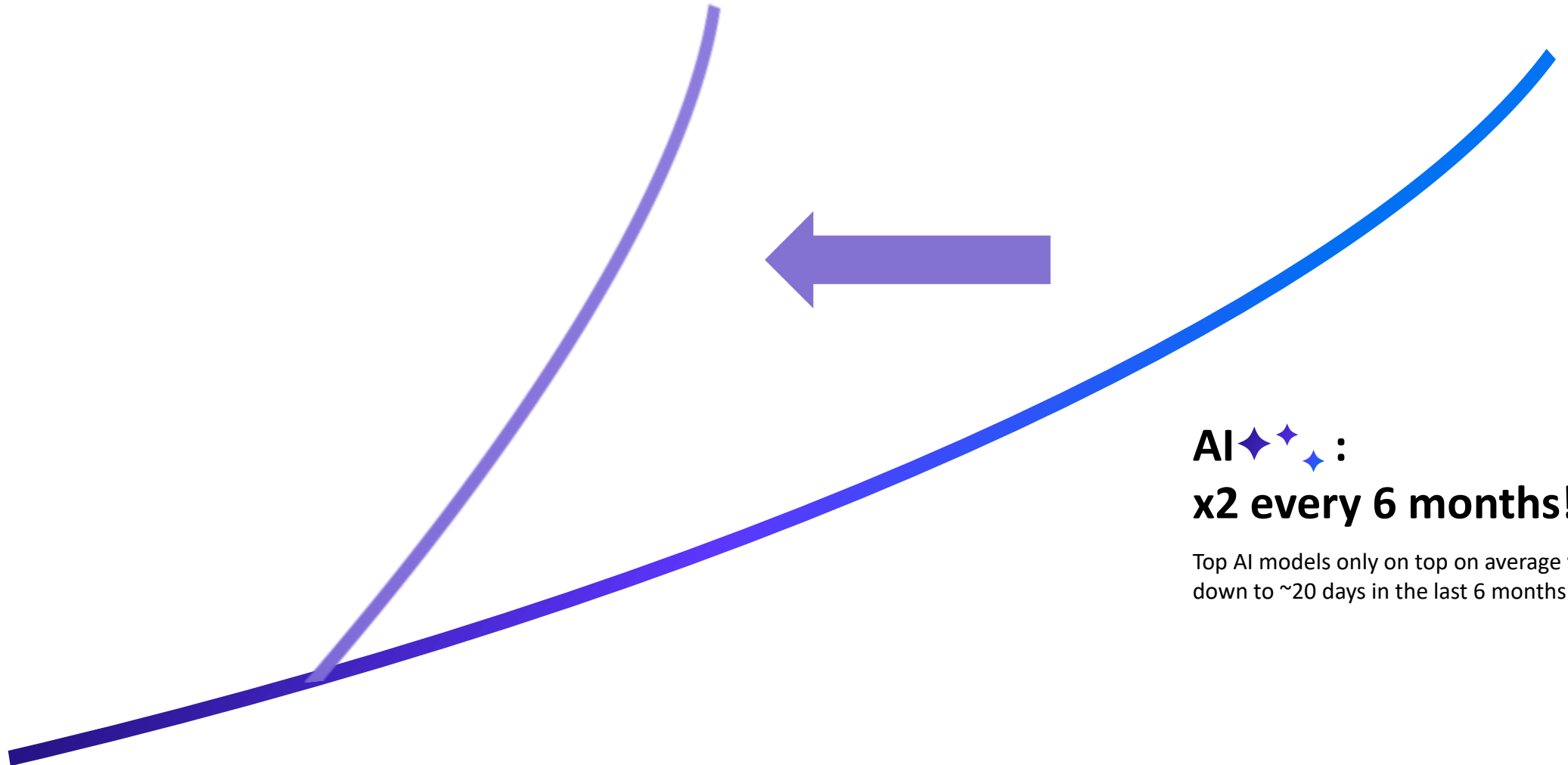


IT Development



**Moore's law:
x2 every 18 months**

AI Development



AI ✨ ✨ ✨ :
x2 every 6 months!

Top AI models only on top on average ~60 days,
down to ~20 days in the last 6 months

Unlocking the next level of Business AI

Emerging AI Capabilities amplify Impact and Innovations



AI is the new UI



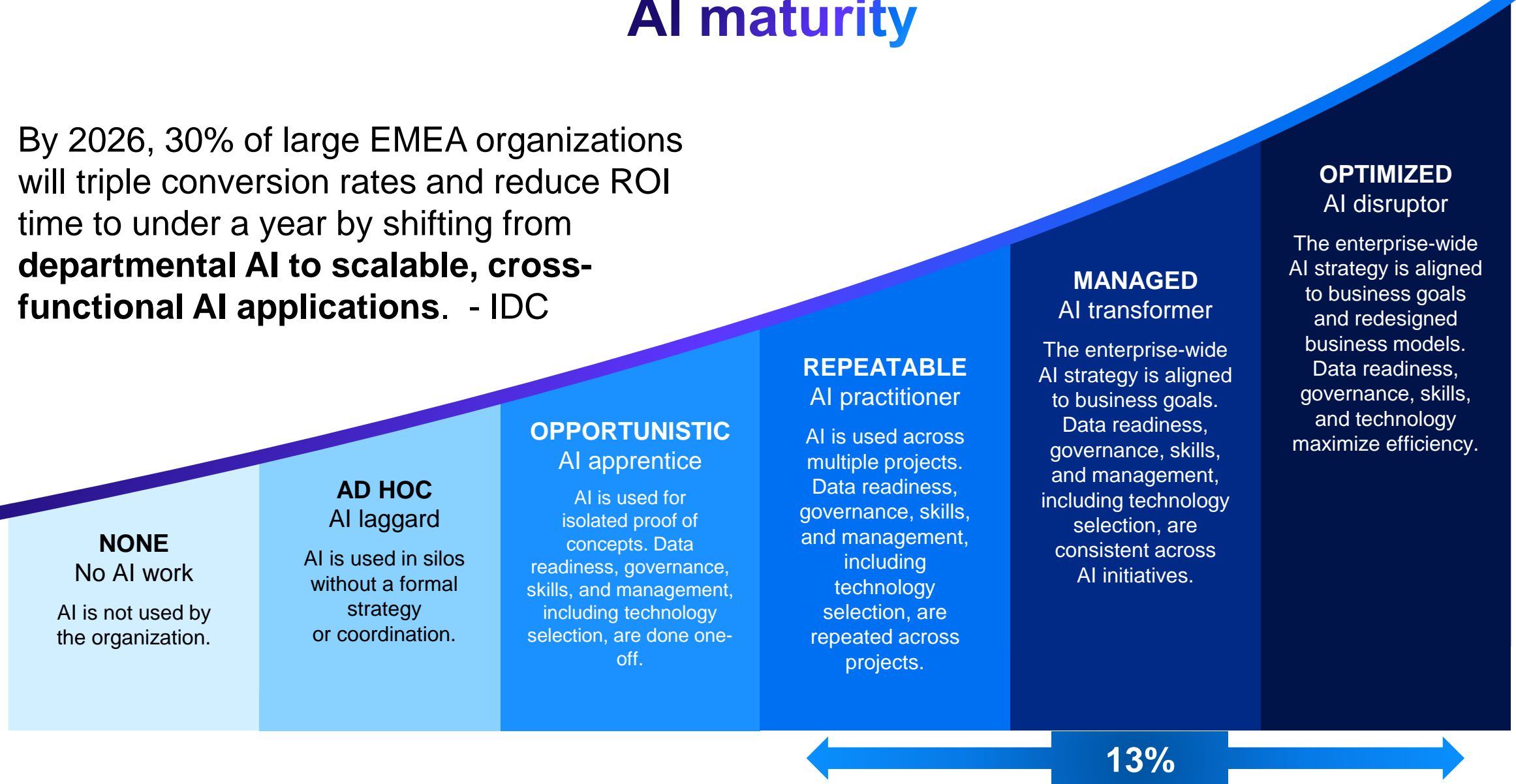
AI Agents at scale



AI Business Models

AI maturity

By 2026, 30% of large EMEA organizations will triple conversion rates and reduce ROI time to under a year by shifting from **departmental AI to scalable, cross-functional AI applications.** - IDC





The actual data

- Correct on its own
- Isolated
- Meaningless

**What
I know**

The semantic data

- Accurate in context
- Relatable
- Real meaning

**What
I understand**

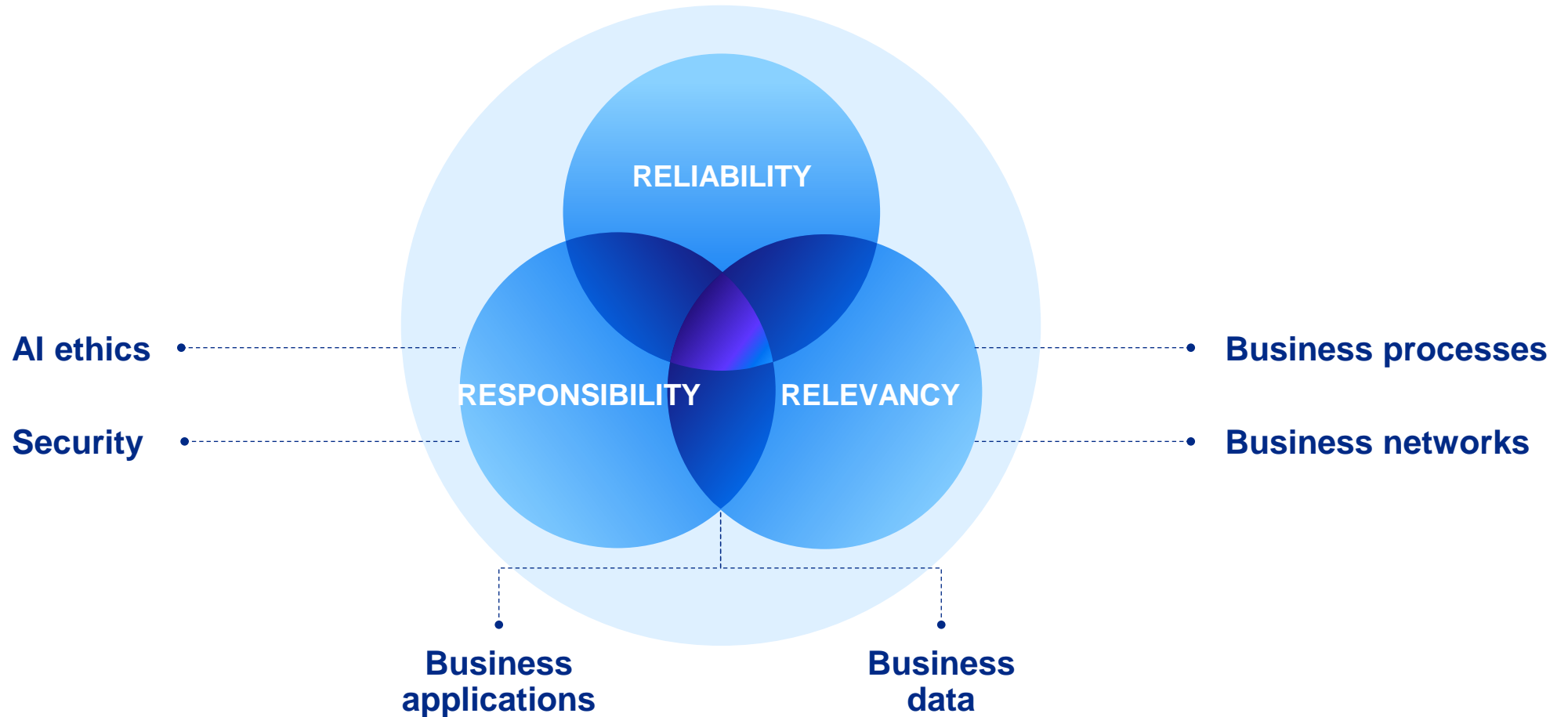
The connected data

- Reveals the hidden
- Deep context
- New in insights

**What
I do**

AI success

AI value realization requires context, security, and scale



Relevant

Reliable

Responsible

Joule

With collaborative multi-agent AI

Embedded AI capabilities

SAP Cloud ERP

SAP Supply Chain Management

SAP ERP Human Capital Management

Spend Management and SAP Business Network

SAP Customer Relationship Management

SAP Business Technology Platform

Customized AI

AI Foundation | Business Data Cloud

on SAP Business Technology Platform

AI ecosystem partnerships and investments



ANTHROPIC



cohere

databricks

Google Cloud



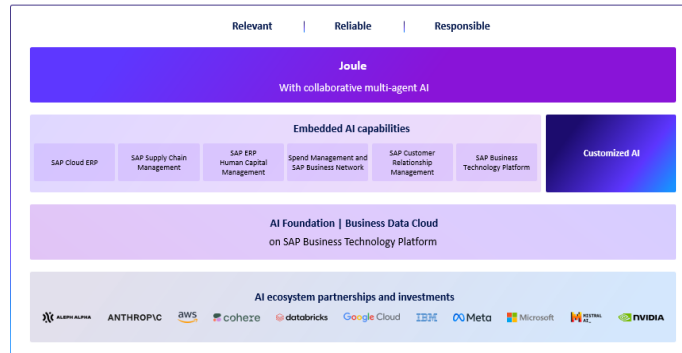
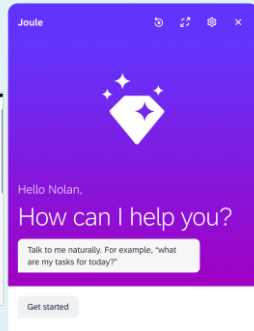
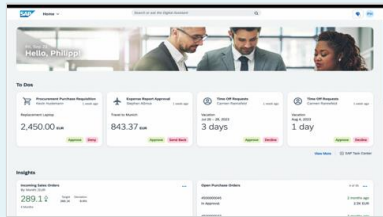
Meta

Microsoft



NVIDIA

Joule in 80%
of SAP applications



100+ Use cases



SAP Knowledge Graph

SAP HANA Cloud Knowledge Graph Engine

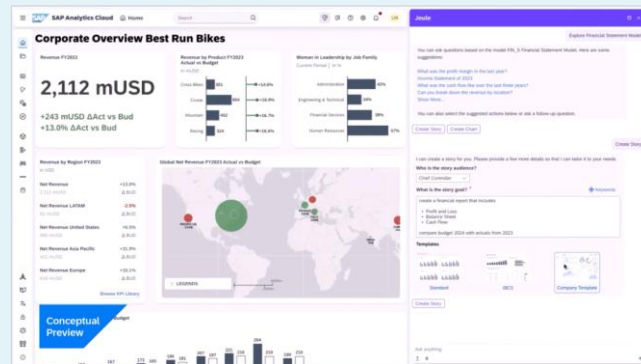
AI Orchestration

Data masking

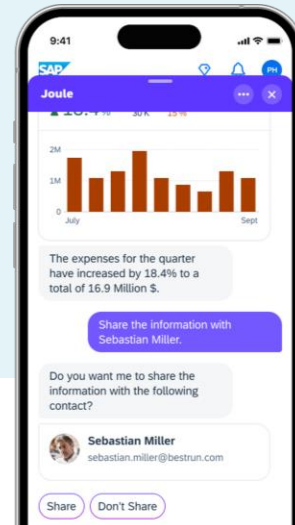
SAP Business AI

Hey Siri, ask SAP

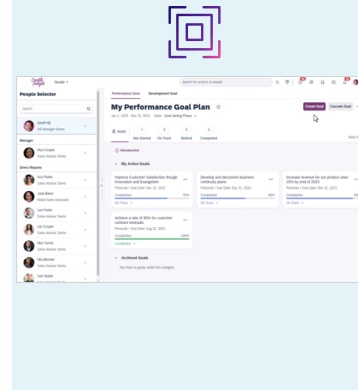
AI for Analytics



Joule for mobile



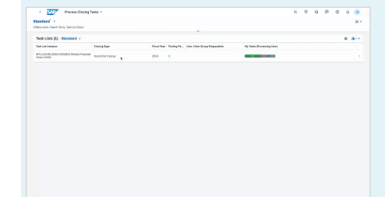
HR
AI assisted goals



Joule agents
across all business processes



Finance
AI Assisted closing



access to top tier models

We got you covered
with generative AI hub

Fri, Sep 22

Hello, Philipp!

To Dos



Procurement Purchase Requisition

Kevin Hudemann

1 week ago

Replacement Laptop

2,450.00 EUR

Approve

Deny



Expense Report Approval

Stephan Aßmus

1 week ago

Travel to Munich

843.37 EUR

Approve

Send Back



Time Off Requests

Carmen Rannefeld

1 week ago

Vacation

Jul 26 – 28, 2023

3 days

Approve

Decline



Time Off Requests

Carmen Rannefeld

1 week ago

Vacation

Aug 4, 2023

1 day

Approve

Decline

[View More](#)[SAP Task Center](#)

Insights

Incoming Sales Orders

By Month | EUR

289.1 [△]/_KTarget 266.1K
Deviation 8.6%

4 Months



Open Purchase Orders

4 of 35

4500000045

In Approval

2 months ago

2.5K EUR

4500000033

2 months ago

People Selector

Search

Geoff Hill
HR Manager Demo >

Manager

Mya Cooper
Sales Advisor Demo >

Direct Reports

Ava Parker
Sales Advisor Demo >

Jada Baker
Retail Sales Associate >

Leo Foster
Sales Advisor Demo >

Lily Cooper
Sales Advisor Demo >

Max Turner
Sales Advisor Demo >

Mia Bennett
Sales Advisor Demo >

Sam Butler
Sales Advisor Demo >

Performance Goal

Development Goal

My Performance Goal Plan

Create Goal

Cascade Goal

...

Jan 1, 2023 - Dec 31, 2025 State: Goal Setting Phase ▾

4 Goals

0

Not Started

3

On Track

0

Behind

1

Completed

Goal Score

Introduction

My Active Goals

Improve Customer Satisfaction through Innovation and Evangelism ...

Personal • Due Date: Dec 31, 2023

Completion 70%

On Track ▾

Develop and document business continuity plans ...

Personal • Due Date: Dec 31, 2023

Completion 60%

On Track ▾

Increase revenue for our product area 15% by end of 2023 ...

Personal • Due Date: Dec 31, 2023

Completion 90%

On Track ▾

Achieve a rate of 90% for customer contract renewals ...

Personal • Due Date: Aug 31, 2023

Completion 100%

Completed ▾

Archived Goals

You have no goals under this category.



Standard



2 filters active: Search Terms, Task List Status



Task Lists (1) Standard



Task List Instance	Closing Type	Fiscal Year	Posting Pe...	User / User Group Responsible	My Tasks (Processing User)	
AFC_CLOUD_2024-2024003 (Global Financial Close S4HC)	Month-End Closing	2024	3		<div style="display: flex; align-items: center;"> <div style="width: 32px; height: 10px; background-color: green; margin-right: 5px;"></div> <div style="width: 10px; height: 10px; background-color: red; margin-right: 5px;"></div> <div style="width: 27px; height: 10px; background-color: gray; margin-right: 5px;"></div> </div>	>

Corporate Overview Best Run Bikes

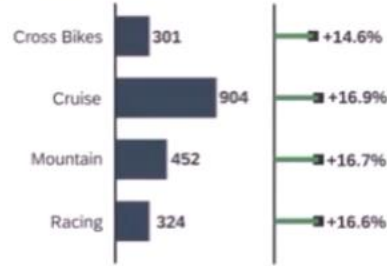
Revenue FY2023

2,112 mUSD

+243 mUSD ΔAct vs Bud
+13.0% ΔAct vs Bud

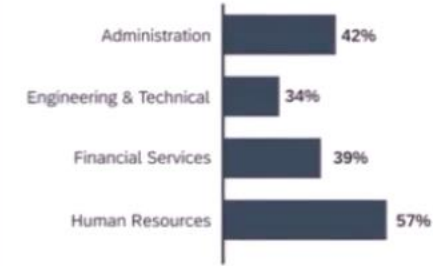
Revenue by Product FY2023
Actual vs Budget

in mUSD



Woman in Leadership by Job Family

Current Period | in %



Revenue by Region FY2023

in USD

Net Revenue +13.0%
2,112 mUSD Δ BUD

Net Revenue LATAM -2.5%
91 mUSD Δ BUD

Net Revenue United States +6.5%
990 mUSD Δ BUD

Net Revenue Asia Pacific +31.9%
412 mUSD Δ BUD

Net Revenue Europe +16.1%
618 mUSD Δ BUD

[Browse KPI Library](#)

Global Net Revenue FY2023 Actual vs Budget



Conceptual Preview Budget



[Explore Financial Statement Model](#)

You can ask questions based on the model FIN_S Financial Statement Model. Here are some suggestions:

- What was the profit margin in the last year?
- Income Statement of 2023
- What was the cash flow like over the last three years?
- Can you break down the revenue by location?
- Show More...

You can also select the suggested actions below or ask a follow-up question.

[Create Story](#) [Create Chart](#)

[Create Story](#)

I can create a story for you. Please provide a few more details so that I can tailor it to your needs.

Who is the story audience?

Chief Controller

What is the story goal? *

[Keywords](#)

create a financial report that includes

- Profit and Loss
- Balance Sheet
- Cash Flow

compare budget 2024 with actuals from 2023

Templates



Standard



IBCS



Company Template

[Create Story](#)

Ask anything



100+ SAP Business AI Scenarios – plus more to come

Q4 2024

ERP and finance

SAP S/4HANA Cloud Public Edition

- Basic Transactional Content – Insights to Business Objects
- Joule for Situation Handling
- Role-based transactional content for Operational Purchaser

SAP S/4HANA Cloud Private Edition

- ASM – Intelligent Maintenance Order Recommendation
- MDM – Simplified Business Partner maintenance v1 (read operations)
- MDM – Assisted Changes and Summarization of Change Requests (MDG)
- MDM – Simplified Business Partner maintenance v2 – Joule
- Finance & Risk – SAP Enterprise Service Management – Shared Services Automation for Finance Content
- Finance & Risk – AFC Feature: Guided Error Resolution
- Finance & Risk – Dispute Management via Communication Intelligence
- Finance & Risk – SAP Behavioral Insights for BRIM – Enhancing Intelligent Collection
- TM: Intelligent Goods Receipt Analysis in Transportation Management v1
- TM: Transportation Cockpit Planning
- Track Sales Orders: Faster insight into Sales Order fulfillment process v1 – Joule
- EPPM – Intelligent Project Assistant – Selected Navigational/Transactional Capabilities – Joule

SAP Signavio

- Process Analyzer: Text to insights

Supply chain

SAP Digital Manufacturing

- Manufacturing Issue Analysis and Solution Assistant

SAP Product Lifecycle Management

- Digitalization of Legacy Drawings
- Document summarization (beta)
- LLM based specification search (beta)

Human resources SAP

SuccessFactors

- Text Analyzer/Safety Scan
- Assisted Opportunity Marketplace Assignment Generation (User driven)
- Assisted 360 Reviews & Insights
- Assisted Writing with Recognition Messages
- Assisted Writing for People Profile, Onboarding, Dynamic Teams, Objectives, Key Results, and Talent Intelligence Hub
- Assisted Writing with Content Translation
- Assisted Progress Insights
- AI-assisted Person Insights – Compensation Discussion in new People Profile

Procurement

SAP Ariba

- Supplier Matching for SAP Spend Control Tower
- Spend Categorization for SAP Spend Control Tower

SAP Concur

- Travel Personalization for flight recommendations

SAP Fieldglass

- Joule assisted report and search
- Joule assisted help information retrieval

SAP Business Network

- Assisted Q&A in Joule
- Invoice error summarization

Sales and marketing

SAP CX AI Toolkit

- Shopping Assistant: Ask the Product, Semantic Search and Intent based Search for consumers in Commerce Cloud
- AI tool builder support for list of records
- Automated AI agents
- Intelligent Q&A subject matter expert
- AI image generation with overlays
- Joule availability

SAP Service Cloud, Version 2

- Next Best Actions-Suggest Collaborators
- AI-assisted entity extraction

SAP Field Service Management

- Equipment Insights: translations
- Intelligent Filtering: additional language support

SAP Enterprise Service Management

- AI-assisted backend entity extraction

Industries

- Life Sciences – Generative AI Assisted Batch Release
- Public Sector – Navigational Assistance to Public Sector Management Applications through the Joule Co-Pilot
- Sports & Entertainment – AI Scout in Sports One

IT and platform

SAP Build Code

- Joule copilot for queries regarding SAP application development

SAP Build Work Zone

- Joule integration

SAP HANA Cloud

- Issue Summary Generation
- Intelligent Assistant in HANA Cloud Central
- Native Vector Embeddings

SAP Build Process Automation

- Generative AI for Process Automations
- Adoption of Document Information Extraction premium

Q1 2025

ERP and finance

SAP S/4HANA Cloud Public Edition

- Intelligent Extensibility Accelerator for Business add-ins (BADI)
- Smart Summarization for Fiori Elements-based objects page
- Easy Filter for Fiori Elements-based list reports
- Generative AI for Situation Handling
- Financial Business Insights
- Advanced Financial Closing-Automated error explanation and guided resolution
- AI-assisted US tax jurisdiction configuration
- Error Resolution Assistant - Production Accounting

SAP S/4HANA Cloud Private Edition

- ASM – AI based task list recommendation for maintenance order creation
- ASM – Creating Repair Objects from Paper
- Master Data Governance - Assisted Change for "Customer Objects" (MDG)
- Master Data Governance - Summarize Mass Changes (MDG)
- Finance & Risk – Journal Upload with Generative AI
- Finance & Risk – Intelligent Trade Product Classification
- Finance & Risk – Enhancement of Behavioral Insights with additional attributes
- LE: Intelligent Inbound Delivery
- EWM: AI based warehouse order streaming and task optimization v1

Supply chain

SAP Digital Manufacturing

- Integration of visual inspection with quality management of SAP S/4HANA for inspection planning
- Analyze efficiency and effectiveness of visual inspections

SAP Integrated Business Planning:

- Explanation of supply optimization planning results
- Generative AI Assistant for Excel Add-in

Industries

- Discrete Industries – AI-powered everything-as-service and outcome-based-business pricing models
- Life Sciences – AI enabled Control Tower for Advanced Therapies
- Life Sciences – Intelligent Error Resolution in the Life Sciences Supply Network
- Commodity Management – Generative AI Enabled - Cross Industry Scope: Phase 1 - Energy
- Retail – Automated promotion generation based on demand / traffic
- Retail – Advanced product and order search, summarize recent eCommerce and in-store, transactions, and aggregating data to generate insights

Sales and marketing

SAP CX AI Toolkit

- Contextual experience for SAP Cloud for customer
 - Additional application language support
 - Media attachment analysis for attribute detection and product description
 - Publish Commerce AI outputs to custom application
 - Custom AI tool for Commerce Cloud
 - Embedded UI for Commerce Cloud
- #### SAP Sales Cloud, Version 2
- Sales order & pricing simulation insights
- #### SAP Field Service Management
- Generation of a service report including smart forms
 - Providing Joule functions for the dispatcher
 - Voice recognition and voice-to-text functionality
 - Analysis of similar activities

Procurement

SAP Ariba

- Bundling
- Contract Assistant

SAP Concur

- Policy search
- Cost estimates
- Travel Personalization – flight

Business Network

- BNP and BNSC – NextGen

IT and platform

SAP ABAP

- Joule's ABAP Developer Capabilities
- ABAP AI SDK with ISLM

SAP BTP Cockpit

- Joule integration

SAP Build Code

- Joule support complex multi steps code
- Joule for analyzing existing code (explain)
- Joule for Fiori tools and UI5 guided development

SAP Build Apps

- Low-Code Formula Editor
- UI generation from dat

SAP Build Work Zone

- Generative AI-driven content creation assistance
- AI grounding and reference based on SAP Build Work Zone content and documents

SAP HANA Cloud

- HANA Cloud Knowledge Graph Engine
- Generative AI Toolkit for HANA Cloud
- NSE for Vector Data RME

What are AI agents?

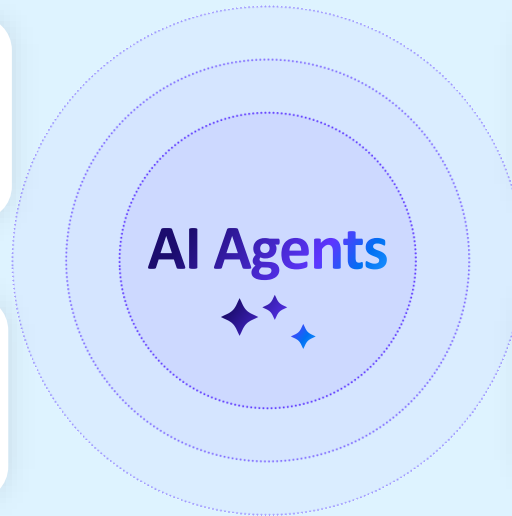
AI agents can autonomously interact with the environment and iteratively reason through multistep tasks to achieve a goal.



Planning



Tool usage



Reflection



Collaboration & multiagent

IDC: By 2028, 40% of the business professionals in the top 500 EMEA companies will rely on AI agents and orchestrators for reporting and data workflows, accelerating data access democratization to solve business challenges faster.

SAP Joule agents

And many more

Finance

Customer experience

Human capital management

IT

Procurement

Spend management

Supply chain

Sustainability

The screenshot displays the SAP Joule interface with a purple header. Below the header, a message reads "to speed up your daily work!". The main content area features three cards. The first card is for the "Collection Agent" (SAP S/4HANA), which is active and lists capabilities: monitoring accounts, issuing warnings, analyzing recommendations, and generating reports. Below this card are buttons for "Watch Tutorial" and "Generate Report". The second card is a notification: "I've detected two payment issues already:". The third card lists two disputes: "BestRun-AC" (Invoice #INV5634566) and "Best Run Systems Corp" (Invoice #INV7567601), each with a "Details" link. At the bottom, there is a text input field labeled "Message Joule..." and a send button.

SAP Joule agents

in action

The screenshot displays the SAP Joule agents interface on a laptop. The browser window shows the URL www.sap.com and the date Tue Oct 8 9:41. The dashboard includes a 'Hello, Philipp!' greeting, a 'To Dos' section with three approval tasks, and an 'Insights' section with three charts. A 'Joule' chat window is open on the right, showing a message and a 'Collection Agent' card.

To Dos

- Discount Approval**
Oct 8, 2024 07:00AM
Today
10% Reduction of Invoice Amount
TheBestRun Supplies
[Approve](#) [Deny](#)
- Legal Action Approval**
Oct 4, 2024 10:00AM
4 Days Ago
Initiation of Legal Action
TheBestRun Innovations Ltd.
[Approve](#) [Deny](#)
- Dunning Approval**
Oct 5, 2024 10:00AM
3 Days Ago
Authorization of Dunning Procedure
TheBestRun Solutions Inc.
[Approve](#) [Deny](#)

Insights

- Days Sales Outstanding**
Average DSO | USD
17.5 ∇
Target 15 d Deviation 2.5 d
DSO by Month

Month	Actual	Target
Jun 24	12.42	15
Jul 24	18.83	15
Aug 24	11.31	15
Sep 24	11.31	15
- Cash Flow**
Overall Cashflow | USD
41.2 Δ MM
Target 42 MM Deviation -0.8 MM
Cash Flow by Month

Month	Cash Flow (MM)
Jun 24	12.3
Jul 24	17.3
Aug 24	-11.2
Sep 24	22.8
- Invoiced vs. Incoming Cash**
Average Delta | USD
3.8 Δ MM
Target 1.5 MM Deviation 2.3 MM
Delta of Invoiced vs. Incoming Cash

Month	Delta (MM)
Jun 24	1.2
Jul 24	2.0
Aug 24	8.1
Sep 24	4.2

Joule Chat

Today 8:00 AM

Good morning, Philipp!
Your administrator added a new service to speed up your daily work!

Collection Agent (Active)
SAP S/4HANA

Business AI Capabilities

- Monitor and assess accounts
- Issue warnings and prepare reminders
- Analyze and propose recommendations
- Generate reports

[Watch tutorial](#) [Generate report](#)

Message Joule...



BEYOND

Personalization Scaling

- Ground work, consumer-led
- Pseudo-Personalization
- Individualized work paths

BEYOND

Personalization Scaling

BEYOND

Predictive Everywhere

- Workarounds
- Tabular foundation models
- Neurosymbolic AI
- Resurgence of classic ML

Personalization Scaling

Predictive Everywhere

BEYOND

Proprietary Data

- Finite Public Data
- Behavioral Operations Data
- Your differentiator

BEYOND

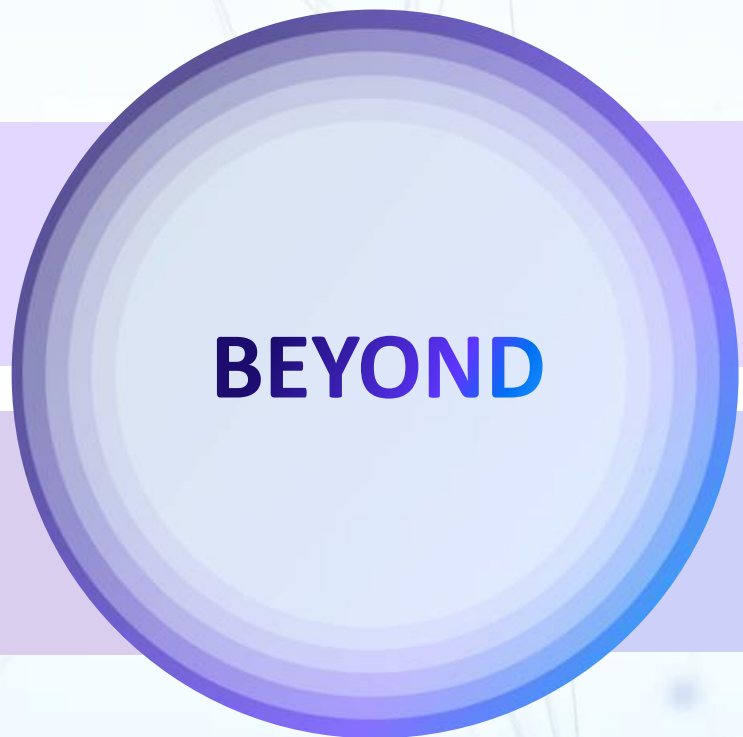
Personalization Scaling

Predictive Everywhere

Proprietary Data

Pervasive AI

- Specialized Models
- Contextual Awareness
- Arms & Eyes



Personalization Scaling

Predictive Everywhere

Proprietary Data

Pervasive AI

Craft your AI strategy



Relevant

- Focus on **business use cases** with scale
- Foster **cross-functional teams**, combining AI expertise with business understanding
- Integrate **AI in digital core** to enhance insights and processes without disrupting workflows

AI feature catalog



Reliable

- Leverage the **structured data** present
- Ensure AI solutions are **scalable** within the **business process** landscape for easier adaptation to future growth and changes
- Establish **data governance** within core systems

SAP Cybersecurity Strategy



Responsible

- **Include everyone** in the AI agenda
- Ensure transparent, **explainable decision-making** to meet regulatory and ethical standards
- Develop **AI governance** to prevent decision biases

AI ethics handbook



