



Demystifying SAP Joule for Controllers

A practical introduction to SAP Business AI and now Joule can support cost analysis through conversation, navigation, and guided access

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About the Speaker

SAP Solution Advisor and Finance Architect with deep SAP Finance and Controlling experience
Specializing in SAP S/4HANA Finance, Group Reporting, and finance transformation
Focus on helping controllers and CFOs modernize finance operations with practical AI adoption and SAP S/4HANA Phase 0 Advisory.

Focus

SAP AI/IF Finance

Expertise

S/4HANA, Finance S cloud, SAP AI/IF

Role

Solution Architect

Company

ERP Inc. LLC

Three Faces of SAP Joule

One AI platform, three specialized experiences



Joule for Consultants

Who: SAP Implementation Partners

- AI-assisted configuration and implementation
- Accelerates SAP project delivery
- Best practices and guided procedures

Joule for Developers

Who: SAP BTP Developers

- Code generation and debugging
- ABAP and CAP assistance
- Build extensions on SAP BTP

THIS SESSION

Joule AI Copilot

Who: End Users / Business Users

- Ask questions in plain English about SAP tasks
- Navigate S/4HANA screens and transactions
- Conversational access to SAP information
- No coding or technical skills needed

Today's focus: How controllers and cost accountants can leverage Joule AI Copilot in their daily work

Session Agenda

What we'll cover in the next 60 minutes

01 The Controller's Challenge

Why AI matters for cost accounting now

02 AI Basics — No Jargon

LLMs, grounding, and why it matters

03 Meet SAP Joule

What it is and where it fits

04 Practical Joule Use Cases

Navigation, conversation, and guided access

05 Joule Agents — What's Emerging

From assistance to approved actions

06 Getting Started Checklist

Licensing, access, and first pilot

The Controller's Challenge

Why AI matters for cost accounting — without the hype

Sound Familiar?

Challenges controllers face every single period

Find

the right app, report, variant, or KPI tile

Navigate

across menus, launchpad groups, and help documentation

Explain

where users should go next without over-relying on power users

Enable

new users faster while preserving controls and authorizations

The immediate opportunity is not replacing controllers. It is reducing friction between the controller and the SAP information they need.

What If You Could Just Ask?

Instead of searching menus, memorizing app IDs, and asking the same “where do I go?” questions

Ask Joule

“Where can I open the Cost Centers Review Booklet, and what filters should I use first?”

A grounded message for today: Joule can help users express business needs in natural language, then point them to the right SAP content or app and explain how to access it. Advanced analytical reasoning still depends on the activated SAP capability, report, data model, license, and release.

Position Joule as an assistant for access, context, and enablement — not as a replacement for CO reporting, SAC, or expert judgment.

AI Basics for Controllers

No jargon, no hype — just what you need to know

What Is a Large Language Model (LLM)?

The technology pattern behind generative AI experiences

1

Trained on Text

LLMs learn patterns from large volumes of text and examples.

2

Predicts Helpful Responses

When you ask a question, the model generates a likely helpful response based on context.

3

Needs Grounding

For enterprise finance, the model needs SAP context, permissions, and trusted sources.

For controllers, the key question is not “Can AI speak?” It is “Is the response grounded in the right SAP process and authorized information?”

Why Generic AI Is Not Enough for Finance

Generic AI knows language; it does not know your SAP landscape

Generic AI

- No native access to your SAP tenant
- Does not know your roles or authorizations
- Can confuse SAP terminology
- May guess if not grounded
- Not a place to paste sensitive finance data

SAP Joule

- Embedded into SAP application experiences
- Uses SAP context and enabled integrations
- Respects business roles and permissions
- Can guide users to apps, help, and supported tasks
- Capabilities vary by product, release, region, and license

How SAP Grounds AI

The practical controls that make enterprise AI different

1

Business Context

SAP process language, application context, and user intent help route the request.

2

Security & Authorization

Joule can only support what the user is authorized to access in the connected SAP application.

3

Grounded Sources

Responses can be grounded in SAP Help, enterprise documents, app context, and activated business objects.

Important boundary: grounding does not mean Joule can answer every CO analytical question directly. Some insights must still come from the application, review booklet, analytical report, SAC story, or data model.

Think of Joule Like a Smart SAP Guide

One who helps you get to the right place faster

You ask

“Ask where/how to open the Cost Centers Review Booklet.”

Joule can help

Tell the user where and how to access the relevant SAP app or content if the capability is enabled.

You still analyze

Use the booklet, filters, reports, and your CO judgment to validate results.

Value created

Less time searching; more time interpreting and advising the business.

Meet SAP Joule

SAP's AI copilot — practical, embedded, and still evolving

What Is SAP Joule?

1

AI Copilot

An SAP AI assistant experience embedded across SAP applications and designed to simplify work.

2

Natural Language

Users can ask for help, navigation, information, or supported tasks in plain English.

3

Context-Aware

Joule can use app context, user role, permissions, and enabled SAP application integrations.

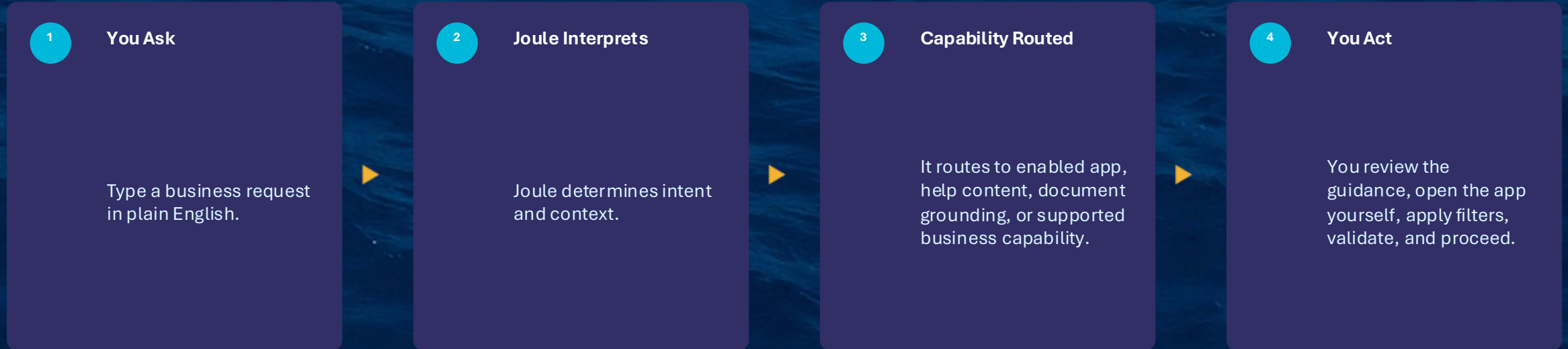
4

Enterprise-Grade

Designed with SAP security, compliance, and governance patterns for enterprise use.

How Joule Works: Ask, Route, Assist

A practical process behind many Joule interactions



Use this four-step explanation to keep expectations realistic: Joule assists; SAP applications and configured analytics still provide the authoritative finance outputs.

Where Joule Lives in S/4HANA

Availability depends on product, release, region, setup, and license

Joule is accessed from supported SAP application experiences, including SAP S/4HANA Cloud scenarios.

SAP positions Joule for informational, navigational, and transactional task support.

Users can ask where an application is and how to access it; today, they should expect guidance rather than automatic app launching.

The current practical expectation is guidance, explanations, and links/paths—not automatic opening of every app.

Each organization must validate scope, entitlements, roles, and regional availability with SAP.

Practical framing: “Joule guides users to the work faster; the controlling app/report remains the system of record.”

Practical Joule Use Cases

Conversational and navigational examples controllers can use today

Five Practical Use Cases

Everyday controlling scenarios where Joule can reduce navigation friction

1 Find where/how to access the Cost Centers Review Booklet

2 Find cost center master data apps

3 Locate cost center / functional area information

4 Find plan/actual reporting and filters

5 Ask for SAP Help and process guidance

These are intentionally grounded use cases: Joule guides access and conversation; the controller performs analysis in the relevant SAP app or report.

Use Case 1: Find the Cost Centers Review Booklet

A realistic first prompt for overhead accounting users

Example prompt

“Where can I open the Cost Centers Review Booklet?”

What happens

Joule tells the user where and how to access the relevant SAP Fiori app if the scenario is enabled and the user has access.

Controller action

User applies ledger, reporting date, company code, cost center hierarchy, and other filters in the booklet.

Business value

Less search time and faster onboarding for controllers who do not remember app names or launchpad locations.

SAP Help identifies the Cost Centers Review Booklet app as F7763. It displays and validates cost center data with actuals, plan/actuals, budget, filters, views, and export options.

Use Case 2: Find Cost Center Master Data Apps

Helping users get to the right maintenance or display function

Example prompt

“Where do I display or maintain cost centers?”

Possible outcome

Joule points the user toward relevant apps or SAP Help content for cost center master data.

Controller action

User follows the guidance, opens the appropriate app, and verifies validity dates, descriptions, hierarchy assignments, and responsible persons.

Boundary

Joule should not be positioned as changing master data unless a specific enabled transactional capability supports that action and approval model.

Best practice: present Joule as a guided access layer. Master data governance, ownership, and approvals remain SAP process controls.

Use Case 3: Locate Cost Center and Functional Area Information

A practical way to support analysis preparation

Example prompt

“Where can I review cost centers and functional areas”

What Joule can support

Help users find the relevant app, help topic, or reporting area that contains cost center and functional area information.

What remains in the app/report

The actual list, filter logic, authorization-limited data, and validation are performed in the SAP application or analytical report.

Example flow: ask Joule to show where and how to open the relevant app → apply company code / controlling area / hierarchy filters → export or review results in the standard SAP application.

Use Case 4: Find Plan/Actual Reporting

Getting users to the right analytical starting point

Example prompt

“Ask where/how to open cost center plan/actual reporting”

Joule Role

Help locate the appropriate app, review booklet, or enablement content and explain where/how to access it.

Report Role

Provide the authorized plan/actual data, filters, views, and export options.

Controller Role

Interpret variances, investigate postings, and prepare management commentary.

This keeps the demo credible: Joule helps the user reach the analysis; it does not have to perform the analysis for the use case to be valuable.

Use Case 5: Ask for SAP Help and Process Guidance

Reducing dependency on tribal knowledge

Example prompt

“How do I use the Cost Centers Review Booklet to compare plan and actuals?”

User enablement

Joule can help users find relevant SAP Help content and training materials faster.

Adoption value

New controllers learn where to go and what the application is intended to do.

Control value

Teams can standardize navigation paths instead of relying on informal shortcuts and outdated notes.

Helpful message for the audience: even before advanced analytics, conversational access to trusted guidance can improve training, adoption, and consistency.

Before Joule vs. With Joule

The controller's navigation experience — a side-by-side view

Task	Before Joule	With Joule
Find cost center review	Search launchpad groups or ask a power user	Ask Joule where/how to open the Cost Centers Review Booklet
Locate master data app	Remember app name or browse Fiori library	Ask where to display or maintain cost centers
Functional area question	Search help or old training documents	Ask Joule for the relevant app/help topic
Plan/actual review	Search through reports manually	Ask Joule where/how to access the reporting starting point
New user enablement	Shadow an experienced controller	Ask conversational questions and follow guided links

The goal is not to replace CO analysis. The first practical win is easier access to the right SAP place, at the right time, with the right context.

The Future: Joule Agents

From conversational assistance to governed task support

What Are Joule Agents?

An emerging model for AI-assisted work — not a blanket promise for every CO process

1

Today

Joule can help with conversational, informational, navigational, and supported task experiences.

2

Emerging

Joule Agents aim to coordinate multi-step work using business context, tools, and governance.

3

Controller Lens

Evaluate agent scenarios carefully: what data, what action, what approval, and what audit trail?

Keep the language realistic: agents may support future workflow execution, but organizations should validate each scenario against SAP release documentation and licensed capability.

Joule Studio: Future Custom Agents

What it adds beyond today's navigational Joule experience

What it is

SAP's AI-first development environment for building custom AI agents, apps, skills, and workflows on the SAP Business AI Platform.

Why it matters

Custom agents can be shaped around your process, data, business context, authorizations, and governed runtime.

Important boundary

Joule Studio is evolving. Confirm availability, license, region, release, and S/4HANA connectivity before promising a scenario.

Public Cloud vs Private Cloud capability

Public Cloud: SAP provides an S/4HANA Cloud Public Edition Joule offering for informational, navigational, and supported transactional tasks; validate AI Units, activation, region, and entitlement.

Private Cloud: SAP's Joule Feature Scope Description references connecting SAP S/4HANA Cloud Private Edition systems in a Joule formation. Scenario scope and timing may differ, so confirm release, setup, and roadmap.

Custom agents in Joule Studio

Custom AI agents are created in Joule Studio. Agents can understand natural language, access SAP systems through governed connectivity, use tools, and perform defined tasks when properly authorized and deployed.

Conference message: today's Joule helps controllers find and understand where to work; Joule Studio points to the future of customer-specific, governed AI agents.

Collaborative Intelligence

Joule works with controllers — not instead of them

Human-in-the-Loop

Controllers validate outputs and approve any business-critical next step.

Transparent Boundaries

Present what Joule can do today and what still requires reports, SAC, or expert analysis.

Audit Trail

Governed AI scenarios need logging, traceability, and clear ownership.

Guardrails Built In

SAP roles, permissions, and identity services remain central to safe adoption.

Getting Started

What it takes to pilot Joule realistically with your controlling team

Prerequisites: What You Need

Validate these areas before presenting Joule as available to controllers

1

SAP Product Scope

Confirm your SAP solution, release, and cloud edition. Public Cloud and Private Cloud Joule capabilities, activation steps, and timing may differ.

2

Entitlement & Setup

Validate AI Units, Joule entitlement, region availability, BTP/identity setup, and activation steps.

3

Roles & Authorization

Confirm users have access to the apps, reports, help content, and business data behind the demo.

Do not assume every Joule capability is automatically available. Confirm release notes, feature scope, commercial entitlement, and security setup with SAP.

Data Quality Still Matters

Even navigational AI depends on clear SAP design and language

1

Master Data Naming

Clear cost center descriptions, owners, hierarchy names, and texts help users ask better questions.

2

Fiori Content Design

Launchpad spaces, pages, app names, and business roles should be understandable.

3

Report Clarity

Cost center review views, filters, and variants should be standardized for consistent use.

4

Knowledge Governance

Keep help links, training materials, and process documentation current.

AI does not fix unclear master data, confusing app design, or poor documentation — it often exposes them faster.

Where to Pilot First

Start small, prove value, then scale

1

Pick One Team

Select controllers who frequently help others find reports and apps.

2

Choose 3–5 Prompts

Focus on navigation and help prompts, not autonomous analytical claims.

3

Use Real Roles

Test with actual controller roles and authorization restrictions.

4

Measure Friction Reduction

Track how long it takes users to find the right app or help topic before and after Joule.

5

Document Boundaries

Capture where Joule helps and where users must continue with SAP reports or SAC.

Your Getting Started Checklist

Take this back to your team on Monday

- Confirm which Joule scenarios are available in your SAP landscape.
- Validate entitlement, AI Units, region availability, and activation steps.
- Identify the controller roles and apps to include in the first pilot.
- Select grounded prompts: ask where/how to access Cost Centers Review Booklet, find cost center apps and access path, locate help content.
- Test with real authorizations instead of administrator access.
- Prepare a “what Joule can / cannot do today” message for users.
- Measure time saved in navigation, onboarding, and help-search tasks.
- Feed lessons learned into your SAP AI roadmap.

Common Questions

Things controllers typically ask about Joule

Is Joule the same as ChatGPT?

No. Joule is an SAP copilot experience designed to work with SAP context, roles, and supported application capabilities.

Can Joule perform root-cause analysis for cost variances today?

Do not assume that. Position advanced analysis only where SAP documents a specific app feature or licensed scenario.

Can Joule replace my reports?

No. Joule complements SAP reports, review booklets, SAC, and controller judgment.

Does it work everywhere?

No. Availability depends on product, release, region, entitlement, setup, and authorization.

Five Key Takeaways

What to remember from this session

- 1 Joule is an SAP AI copilot experience — not a generic chatbot and not a replacement for CO expertise.
- 2 The strongest current message for controllers is conversational access, navigation, and guided enablement.
- 3 Use practical prompts: ask where/how to access Cost Centers Review Booklet, find cost center apps and access path, locate functional area guidance.
- 4 Do not oversell root-cause analysis or autonomous cost analysis unless a documented SAP capability supports it.
- 5 Start with a grounded pilot, validate entitlements, and build toward more advanced SAP Business AI scenarios.

Resources

Learn more and go deeper

SAP S/4HANA Cloud Public Edition, Joule: <https://www.sap.com/products/financial-management/s4hana-cloud-public-edition-joule.html>

Joule Feature Scope Description: https://help.sap.com/doc/0a1c2b2b16f843dca835b44a5db033be/CLOUD/en-US/Joule_FSD.pdf

SAP Architecture Center – Integrating and Extending Joule: <https://architecture.learning.sap.com/docs/ref-arch/464deb>

SAP Generative AI Hub: <https://www.sap.com/products/artificial-intelligence/generative-ai-hub.html>

Cost Centers Review Booklet F7763:
https://help.sap.com/docs/SAP_S4HANA_CLOUD/c56f622a2edf491b9f1b596b55587009/95063eff5ee0467f8cc04b4ff8f8ca01.html

SAP Joule Studio: <https://www.sap.com/products/artificial-intelligence/joule-studio.html>

SAP Road Map Explorer: <https://roadmaps.sap.com/>

Questions & Answers

Thank you for attending this session!

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