

How AI, Analytics, and Intelligent Automation Are Reshaping the SAP S/4HANA Business Case

Embedded intelligence changes what a finished migration looks like. It does not, for most organizations today, change why the migration is worth doing — and the difference between those two claims matters.



It has become common for SAP S/4HANA to be pitched, implicitly or explicitly, as an AI project — a chance to embed generative assistants, predictive analytics, and intelligent automation directly into core financial and operational processes. Some of that framing is accurate. S/4HANA’s in-memory architecture and simplified data model genuinely enable classes of embedded intelligence that were difficult or impossible to build reliably on top of ECC’s older architecture, and SAP has invested visibly in this direction, most notably through Joule, its generative-AI copilot embedded within the S/4HANA Cloud user experience.

The honest question, though, is not whether S/4HANA enables more AI capability than ECC — it clearly does — but whether that capability, on its own, changes the fundamental case for migrating. The evidence suggests a more specific answer: it changes what a finished migration can eventually deliver. It does not, for most organizations today, change why the migration is worth doing in the near term, and conflating the two claims risks setting expectations the technology cannot yet reliably meet.

What the adoption data actually shows

Deloitte’s State of AI in the Enterprise, its 2026 global report drawing on a survey of 3,235 business and technology leaders fielded in August and September 2025, offers a useful corrective to the more breathless framing of enterprise AI. Only 34% of organizations describe their AI use as “deep transformation” — creating

new products or services, or genuinely reinventing core processes. Another 30% describe themselves as “redesigning key processes” around AI. The remaining 37% — the largest single group — are applying AI only at a “surface level,” with minimal underlying process change.

Most enterprise AI use is not yet transformational

How organizations describe the depth of their AI-driven change



Source: Deloitte, The State of AI in the Enterprise, 2026 Global Report (n=3,235, surveyed Aug.–Sep. 2025)

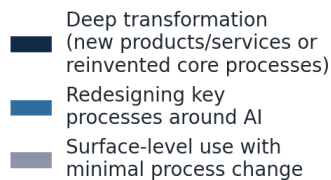


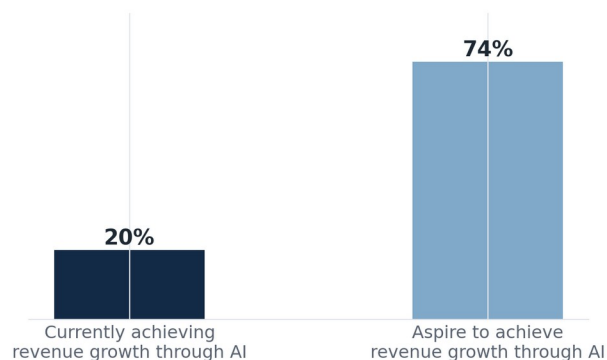
Figure 1. How organizations describe the depth of their current AI-driven transformation.

What this shows: The largest single group of organizations is still applying AI at a surface level. Deep, process-level transformation remains the minority case, not the norm — a useful benchmark against which to weigh any migration pitch premised on AI as the primary driver.

The same report identifies a further, more specific gap: only 20% of organizations report currently achieving revenue growth through AI, against 74% who aspire to. That 54-point gap between ambition and realized outcome is the clearest available evidence that enterprise AI adoption, broadly, remains earlier in its value-realization curve than the surrounding conversation often implies — a pattern SAP-specific AI capability is unlikely to be exempt from simply by virtue of being embedded in newer infrastructure.

The gap between AI ambition and AI-driven revenue

Share of enterprises reporting each outcome



Source: Deloitte, The State of AI in the Enterprise, 2026 Global Report (n=3,235)

Figure 2. The gap between AI ambition and realized AI-driven revenue growth.

What this shows: Aspiration for AI-driven revenue growth is nearly four times more common than organizations currently achieving it — a gap worth factoring explicitly into any business case that leans heavily on AI-driven upside.

None of this means the 66% of organizations reporting improved productivity and efficiency from AI, or the 53% reporting better insights and decision-making, are illusory benefits — those are real, widely reported gains, and they are exactly the categories of benefit embedded intelligence in S/4HANA is best positioned to deliver in the near term: faster transaction processing, better anomaly detection, more responsive analytics. The gap is specifically in the harder, more transformational categories — new revenue, reinvented processes — where the evidence shows most organizations are still early.

What this means for the migration business case

A migration business case that leans heavily on speculative, deep AI-driven transformation — new revenue streams, autonomous process redesign — is building on the smaller and less certain portion of the available evidence. A migration business case built on the more modest, better-supported categories — productivity, decision-support quality, the architectural foundation for AI capability to mature over time — is building on the larger and more consistently reported portion.

This distinction matters practically because it changes what “readiness” means for AI specifically. An organization does not need a fully mature AI strategy to justify migrating; it needs an accurate understanding of what S/4HANA’s architecture will and will not immediately enable, so that AI-related benefits are represented in the business case at a realistic level of confidence, positioned as a medium-term capability the migration unlocks rather than a near-term return it guarantees.

A grounded question worth asking before including AI in the business case

Rather than asking “what can AI do for us after we migrate,” a more useful framing is: “what data quality, process standardization, and architectural readiness does our organization need in place before any embedded AI capability — SAP’s or otherwise — can be trusted with a real business decision?” Every one of Deloitte’s named benefit categories depends on the underlying data and process foundation being sound. An organization that migrates without addressing data quality and process fragmentation will find that S/4HANA’s AI capabilities inherit the same limitations, not that the platform shift solves them automatically.

Next Step

Because AI-related capability depends directly on data quality and architectural readiness, Orpington Technologies’ Full ERP Diagnostic Report includes a review of the data and integration foundation a migration will need in order for any AI-enabled capability — SAP’s or third-party — to be trustworthy in production, and Orpington’s Full ERP Implementation Partnership can carry that same foundation-first discipline through to delivery. Organizations weighing how much of their business case to attribute to AI-driven benefit are welcome to discuss a grounded, evidence-based framing with Orpington Technologies.

Sources

- [Deloitte, The State of AI in the Enterprise, 2026 Global Report \(n=3,235, surveyed Aug.-Sep. 2025\).](#)
- [SAP, “Joule, the AI Copilot in SAP S/4HANA Cloud Public Edition.”](#)