



Turn AI into advantage

Running the modern consumer company as an intelligent enterprise



Building an intelligent enterprise means connecting data, functions, apps, and people, so you can respond to consumer demand as it emerges, not during the next planning cycle.



Authors



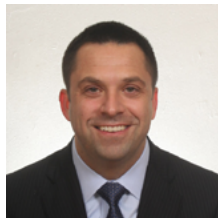
Ali Furman
Consumer Markets Industry Leader, PwC US



Jennifer Colapietro
Digital Core Modernization Leader, PwC US



Jill Niland
Partner, PwC US



Ben Zelinsky
Partner, PwC US

Key takeaways

- **ERP isn't becoming less important. It's becoming more strategic.** As the intelligent core of an enterprise, ERP can be the trusted execution engine AI agents rely on to turn decisions into enterprise action—with the traceability, auditability, and controls the business depends on.
- **Modernize the foundation, then activate the enterprise.** The real return on ERP modernization comes from combining a trusted core with a living data ecosystem, connected business capabilities, and AI agents that continuously orchestrate decisions and execution across the enterprise. As processes are reimaged in the age of AI, the new normal is striking a balance between a clean core and a fully governed agentic ecosystem.
- **The future belongs to companies that continuously sense, decide, and act.** Success depends on combining an intelligent core, connected data, AI agents, and people in an agentic operating model—investing in the capabilities that differentiate your business and standardizing everything else. As product innovation and go-to-market cycles accelerate for consumer organizations, the pressure to connect signals to action is likely to intensify.





Imagine a national grocer setting out to modernize its enterprise resource planning (ERP) platform. Leadership views the migration as a necessary foundation rather than the destination. So, alongside the ERP transformation, the company invests in a unified data ecosystem with its own data ontology and creates a flexible enterprise architecture capable of continuously integrating new AI and agentic capabilities as they emerge. The ERP modernization delivers a clean, modern foundation—but the strategic value comes from building the intelligent enterprise around it.

This kind of future-forward thinking can play a key role in running a modern consumer company. Leaders should know the time has come for a different set of questions than they were asking a couple of years ago. It's no longer, "How do we pilot AI?" The question now is, "How do we redesign how the business thinks, decides, and acts?" That's the defining challenge of **the intelligent enterprise**.

An intelligent enterprise can continuously sense what's happening across customers, markets, suppliers, and operations; reason across those signals using AI; and execute coordinated actions in real time. Delivering that capability requires four foundational components, and each element reinforces the others.

- **An intelligent core** that can execute enterprise transactions with trust and integrity
- **A living data ecosystem** that helps connect enterprise and external data into a trusted foundation and a unified ontology
- **An enterprise orchestration layer** where AI agents can coordinate work across business capabilities and multiple technologies
- **An agentic operating model** where people and AI agents can collaborate to continuously improve business outcomes, monitor actions and decisions, and continuously adjust the way work is being delivered

Even as AI reshapes the business, your ERP should matter more than ever as the enterprise system of execution—executing sales orders, purchase orders, inventory movements, production orders, and financial postings with the reliability and scale a consumer business depends on. But the work of enhancing the consumer-facing business is moving to the connected systems around it: sensing emerging demand, coordinating trade-offs across functions in real time, adjusting when a promotion catches fire two days in. That work happens in planning tools, trade promotion management (TPM), pricing engines, customer data platforms, and, increasingly, an intelligent layer of AI agents that ties them together.

This is why the “software-as-a-service (SaaS) is obsolete” narrative misses the point. Software isn’t disappearing. Enterprise architecture is evolving. Rather than expecting one application to perform each function, organizations are creating connected business capabilities where specialized applications work together through AI-driven orchestration. Innovation no longer happens inside individual applications. It happens across the enterprise.



Why the edges matter as much as the center

Consider a near-universal process in consumer markets: a trade promotion. A grocer wants to run a two-week feature on cold brew ahead of a summer heat wave. A sporting goods retailer wants branded basketballs on shelves the moment a local team makes the playoffs. In each case, the demand signal is real, specific, and time sensitive. And in each case, ERP is not where the value is created. It can record and execute the sales orders and post the financials. But whether the promotion actually works, meaning whether the right product reaches the right shelf at the right price at the right moment, depends on everything happening around it.

That “everything” is where consumer companies can invest to create an intelligent enterprise. When ERPs, planning systems, TPM, product life cycle management, pricing engines, customer data platforms, and data lakes are all connected by an intelligent layer of AI agents, enabled by the human-AI relationship—and perhaps not even just within the four walls of a consumer company but also among external parties like retail execution providers, syndicated data providers, or even external financial settlement and clearance houses—you can sense demand as it emerges and coordinate the enterprise response. Much of that connective work happens in the front office—the TPM, pricing, and customer data systems that sit closest to the customer—and that’s what becomes your **intelligent customer edge**: the point where demand becomes action.



A shift in how to think about your architecture

The move to an intelligent enterprise requires rethinking a few long-held assumptions. Consider these shifts:

From traditional enterprise architecture	To intelligent enterprise architecture
ERP is the system of record.	ERP is the intelligent core and system of execution.
Systems are designed process-first.	Systems are designed data- and AI-first.
Innovation occurs inside applications.	Innovation occurs through enterprise orchestration.
Employees are trained on modeling transactions and monitoring screens.	Employees are trained on prompting and co-working with AI agents as well as “meta-skills” to enable the rapid intake and mastery of new skills.

Each shift reinforces the others. If your data is clean and lives where it belongs, agents can act on it—and humans can manage the strategy around it. If innovation happens at the edge, your ERP can stay stable and cheaper to run. If your people are freed from transactional busywork, they can focus on what things create competitive advantages like judgment, industry expertise, and customer relationships.



What “cleaner and leaner” really means

For decades, companies have been packing their ERPs with data that doesn't need to be there. Deep product hierarchies built for commercial reporting. Material attributes engineered for analytics. Customer records with dozens of fields that never touch a transaction. All of it slows the system down and makes the next migration more expensive than the last.

The modern approach is simpler. Only data required to execute a transaction belongs in your ERP. Most product data belongs in a product data management system. Analytical data belongs in a data platform. Marketing attributes belong in the marketing stack, such as in customer data platforms, campaign tools, and personalization engines, rather than in the ERP. Your ERP becomes a set of rails—reliable, on time, well maintained—rather than a warehouse for everything the business has ever wanted to track.

Data portability is now a strategic issue rather than a technical one. It's the foundation you're laying today for an AI-enabled future and the ongoing transformation that will likely follow. As the ecosystem of platforms and agentic tools expands—and as innovations we can't yet predict emerge—consumer companies require the flexibility to plug in the most effective capability for the job, whether that's today, in five years, or in response to a breakthrough no one sees coming. That requires a deliberate data strategy, one that keeps your information accessible, interoperable, and governed across systems, so it's ready to fuel the intelligent layer, adapt to new models and architectures, and power whatever comes next.



What this looks like in practice

The pattern above isn't hypothetical. Variations of it are being built right now at some of the largest consumer companies in the world. Return to the national grocer example from the opening. The ERP migration was the catalyst, but the value came from what was built alongside it—a data foundation flexible enough to evolve with the technology and connected value systems ready for agentic capabilities as they mature. That foundation is often what positions the grocer not just for today's use cases, but for the next wave of transformation and the growth opportunities that come with it—such as new formats, new channels, and new markets—without another ground-up rebuild.

Imagine a leading food manufacturer taking a similar path with a leaner ERP, a unified data foundation, and a set of value systems—planning, trade, pricing—that can be modernized and connected without disturbing the core. The point isn't only to transform its ERP. It's to build the conditions under which the rest of the business could transform.

Consider a leading convenience chain applying the same thinking to a different problem: growth. Facing pressure to expand without adding headcount, the company modernizes its core alongside a data foundation designed to support automation and agentic capabilities across the value chain. ERP keeps the fundamentals running, while the intelligent layer built around it enables the business to scale.



Each conversation about the intelligent enterprise comes back to people, and the companies moving fastest are likely designing for that from day one.

Five actions to prioritize

1. **Modernize the core, but scope it tightly.** Point your ERP at the transactions that help run the business and do that job exceptionally well with clean, authoritative master and transactional data. AI-native operations are only as good as the data beneath them, and agents can only act with confidence when each system of record is trustworthy. Let the platforms built for product, marketing, and attribute data own their domains. Unclear systems of record break this quickly. A leaner core is often faster to upgrade, cheaper to run, and easier to connect.
2. **Build a trusted data foundation.** Bring your proprietary enterprise and customer data together with relevant second- and third-party data. Design for data portability and **trust from the start**, so your information stays safe and accessible across systems. Without unified, governed data, agents can struggle to act with confidence.
3. **Prioritize your differentiated capabilities.** You should not transform everything at once. Identify the capabilities that genuinely distinguish your business—trade, planning, allocation, customer experience—and invest there first. Standardize the rest.
4. **Buy capabilities, not apps.** Shop for the agentic capabilities you require to fill gaps. An orchestration layer is often critical to govern agents across multiple applications and get them negotiating on your behalf.
5. **Reinvest in your people and operating model.** As AI becomes commodified, industry knowledge and customer empathy can help set companies apart. But bringing an intelligent enterprise to life takes more than training. New roles are emerging to govern agents and manage human-agent teaming. Existing roles are shifting as transactional work moves to systems. Design an operating model where humans and agents work effectively together, train your people on prompting and co-working with agents, and make sure each customer-facing process has a human accountable for it.

A clean core, a connected edge

The companies likely to pull ahead in consumer markets aren't the ones automating old tasks, and they aren't the ones betting everything on a single vendor's promise. They are likely the ones treating ERP as a foundation—cleaner, leaner, and better governed—while also investing in the intelligent layer around it, where demand meets action. This reflects what running a modern consumer company as an intelligent enterprise can look like: a clean core, a connected edge, and an operating model where people and agents work together to help meet demand as it emerges.





Running the modern consumer company as an intelligent enterprise