

CREATING THE LIVE ENTERPRISE: THE AGENTIC AI IMPERATIVE IN MANUFACTURING AND RETAIL

Agentic Al's piecemeal adoption in manufacturing and retail creates local optimization but encourages value leakage overall. To create sustainable value, enterprises need to reimagine entire business processes enabled by this vital new technology. Done right, our research has found the result is a continuously evolving and learning organization – a live enterprise.



Companies have been quick to generate momentum around artificial intelligence (AI). The Infosys AI business value radar found that over 50% of AI use cases now deliver at least some business value, with deployments in IT operations, software development, and cybersecurity more likely succeed.

But this adoption often occurs in fragmented, piecemeal fashion. In one Infosys Knowledge Institute paper on how to implement AI in the organization, Unlocking the Alfirst enterprise: A generative AI blueprint, we showed that organizations often follow a use case-centric approach, building isolated pockets of AI, rather than an enterprise-level, cross-cutting platform or architecture.

A typical large client we serve might use a predictive maintenance model for a single factory floor (manufacturing), a recommendation engine on its e-commerce site (retail), and a demand forecasting tool for a specific product line (fast-moving consumer goods, or FMCG). Each of these tends to be a point solution, developed and deployed in isolation.

This fragmented approach stems from individual departmental initiatives. While each AI tool provides some

value, they operate independently. This creates data siloes, trapping data within individual systems, unable to work with agentic Al technologies that can orchestrate and carry out tasks autonomously.

The high cost of disconnected processes

Because data is trapped in different systems, these landscapes also lack a unified, 360-degree view of the business.

Consider a retailer that receives a new sales order in a Salesforce customer relationship management (CRM) system. Traditionally this process requires a series of manual handoffs: a salesperson updates the CRM, an account manager manually checks inventory in ERP, and a logistics coordinator schedules the shipment. If AI is deployed in these siloed tasks, it can't communicate with other steps in the process: the supply chain AI does not communicate with its customer service AI, leading to duplicate effort and cost, while preventing the business from realizing the value of connected intelligence.

This semi-automated, siloed process is also time-consuming, prone to human error, and delivers a poor customer experience.



From automating tasks to empowering workflows

The next phase of AI maturity isn't to create additional isolated models. It's building a cohesive, integrated intelligence layer across the enterprise.

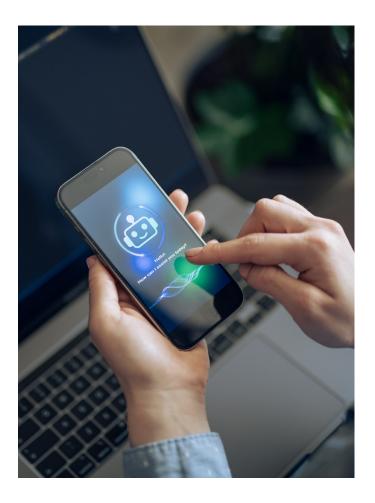
For Infosys manufacturing clients, this means connecting their factory floor AI systems with their enterprise resource planning (ERP) and supply chain systems to create an intelligent factory. In retail, this could mean that AI links customer browsing behavior with inventory levels and supplier lead times, automatically adjusting prices and promotions to maximize profit. For FMCG, it's about a single AI framework that coordinates production schedules, logistics, and marketing campaigns based on real-time market data.

This shift transforms AI from a series of independent tools into a central nervous system for the business, a live enterprise that evolves, learns, and responds faster in a rapidly changing environment.

In this model, decision-making is faster and more data informed. Systems, processes, and culture are designed with embedded capability to evolve, and the value chain is structured for flexibility and resilience.

In retail, a unified AI layer connecting a Salesforce CRM, supply chain, and e-commerce platforms can personalize the customer journey from a marketing email to post-purchase support. If a customer browses a product, the AI can check inventory and use that data to tailor a follow-up ad. If they make a purchase, the same system can track the shipment and automatically generate a personalized thank-you message and a related product recommendation.

In manufacturing, integrated AI platforms connect factory floor sensors with an ERP system. Predictive maintenance models can predict a machine failure and automatically create a service ticket, order the replacement part, and reschedule production, all within a single workflow. In FMCG, AI integrated with a service request platform can improve IT and operational support. When a field technician reports an issue with a point-of-sale terminal, the AI can automate ticket creation as well as access customer and inventory data to suggest solutions, reducing resolution time and improving store efficiency.



Legacy entry and agent collaboration

Agentic AI means workflows can become more goaloriented, autonomous, and non-deterministic, executing multi-step tasks across different platforms.

The real power of AI agents is in their ability to talk to commercial-off-the-shelf (COTS) systems like Salesforce, and talk to each other. Using the model context protocol (MCP) introduced by Anthropic in 2024, agents can access legacy systems and other COTS and software-as-a-service solutions that have traditionally been siloed.

MCP is an open standard that enables developers to build secure, two-way connections between their data sources and Al-powered tools. MCP standardizes how Al models connect to external data and tools. Agent-to-agent (A2A) communication, on the other hand, is where multiple agents collaborate to achieve a complex objective. These agents can be scaled in parallel, covering large, complex workflows, and different specialized agents can pool expertise - like a sales agent, a legal agent, and a marketing agent working together.

To get agentic value, re-imagine business processes

However, it isn't enough to just add the agents to current workflows: Whole processes must be re-imagined, and the Al technology integrated between platforms like Salesforce and ERP systems.

Let's look at how agentic AI re-engineers the traditional sales-to-fulfilment process in manufacturing and CPG industries.

Here are steps in an example semi-automated, fragmented process:

- Salesforce CRM: A new sales opportunity is marked as "closed-won" by the sales team.
- Human intervention: A salesperson manually enters key order details into an email or a shared document.
- ERP: A planner or order management specialist receives the order data and manually inputs it into the ERP to check stock, schedule production, or initiate a new order.
- Human intervention: If there's an issue, such as insufficient inventory, the planner must manually contact the salesperson, creating a back-and-forth communication loop.
- Human intervention: Once confirmed, a logistics team member manually schedules shipment and updates the customer, often using another system.

This process, while partially automated, is littered with multiple friction points and human interactions that introduce delays and potential for errors.

In the agentic process, the steps become the following:

- Salesforce (sales agent): As soon as a deal is marked "closed-won," the sales agent is triggered. It collects all relevant data from the Salesforce record, including product codes, quantities, and customer shipping details.
- Agent-to-agent communication: The sales agent sends
 a request directly to the fulfilment agent in ERP. This
 request isn't just a data dump; it's a command to initiate
 and confirm order fulfilment for the customer.

- ERP (fulfilment agent): The fulfilment agent receives the request and autonomously executes a series of actions, including checking real-time inventory against the order and, if stock is available, reserving the items and generating an internal work order. If stock is low, the agent will also initiate a production request or a purchase order with a specific supplier. Finally, the agentic fulfillment agent will book the shipment with a logistics provider and generate the tracking number.
- Human-in-the-loop: At each step, a human is only notified if a critical exception occurs — for example, if a key part is unavailable from any supplier or if a customer's credit limit has been exceeded. Otherwise, the process flows automatically.
- Final confirmation: Once all steps are complete, the fulfilment agent sends a confirmation message and tracking number back to the sales agent, which updates the Salesforce record and sends a shipping notification to the customer.

Starting the agentic journey

Enterprises adopting this agentic model, away from point solutions, should follow six steps:

- 1. Own the end-to-end journey. Big software companies like Salesforce and ERP providers are adding generative AI and agent-based tools into their products. But these tools often work in isolation. Companies should connect them so that the agents can work smoothly across different platforms. A key decision is whether to rely on the intelligence built into these platforms or to develop your own. Focus on the three to five most important customer or employee journeys for your business, and make sure you control the AI intelligence behind those.
- 2. Start with a solid foundation. When building your live enterprise, get the basics right: standardized infrastructure; governed, accessible data; responsible AI standards; and agreed, standardized protocols for agents to engage and share context, such as MCP and A2A, with standard data structures. Ensure key applications expose agent-ready APIs to accelerate new agent implementations.
- 3. Make humans accountable. Design responsibilities around end-to-end workflows, empowering leaders to drive automation across boundaries. Hold workflow owners accountable to reduce cycle times, remove person-to-person hand-offs, and improve value metrics.



Provide them a mandate and capability to identify and implement intelligent automation.

- **4. Bring discipline to scale.** Route strategic and priority decisions through a central governance entity, such as an agentic center of excellence. This model enables scalability and fit with the enterprise landscape.
- 5. Move from use case to value case. Prioritize workflows and journeys where automation and intelligence maximize value. Many organizations get lost in tactical use-case pilots and miss the transformational value in organization-wide initiatives.
- 6. Keep people at the center. Companies need to understand the scope of coming changes. To leverage their legacy assets and compete with Al-native competitors, they must be willing to rethink and even disrupt their current ways of working. An agentic center of excellence should lead with a dual approach — reduce cost through efficient processes, while creating value through new business models enabled by agentic Al.

Reimagining processes with agents as key participants will build connected, intelligent workflows that deliver new efficiency and business insight – a live human+Al enterprise that continuously learns and evolves.

Authors

Phil Benton

Partner, Infosys Consulting, EMEA

Anmol Jain

Managing partner, Infosys Consulting, APAC

Alp Kabatepe

Head of CRM, Infosys Consulting, EMEA

Michele Boudway

Partner, Infosys Consulting

Daniel Le Jéhan

Global lead partner, Infosys Consulting

Harry Keir Hughes

Infosys Knowledge Institute, London

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For more information, contact askus@infosys.com

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