A FIELD GUIDE TO REIMAGINING THE RETAIL VALUE CHAIN FOR THE AGENTIC ECONOMY

June 2025

MILO AND THE RETAIL MARKETPLACE.

PART 1: IMPACT OF AI AGENTS ON THE RETAIL ORGANIZATION

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To Kim, Founder of First Retail Inc.

PREFACE: WHAT HAPPENS NEXT IN RETAIL

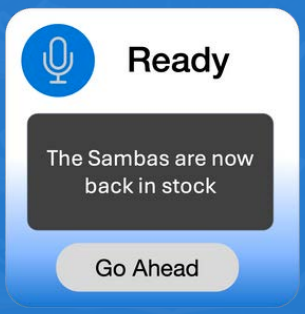
Retailers are under pressure to deliver more automation, more personalization, and more efficiency. Most efforts focus on improving what already exists. But a different model is taking shape—one where AI agents act on behalf of customers, working across systems to complete real tasks with minimal input.

This paper introduces a set of ideas that help explain how this shift will unfold. It is not a technical manual, and it does not assume implementation is around the corner. Instead, it offers a way to think differently about the systems we build and the assumptions we carry into that process.

The underlying technologies are already here. They are not yet reliable enough to manage mission-critical operations at scale—but they are improving fast. Every month, what was previously experimental becomes product-ready.

The structural shift begins inside the organization. When agents take on execution work, the structure of roles, teams, and decision-making changes too. Forecasting, buying, and merchandising no longer need to operate in silos. Agents work across functions. That opens the door to new workflows, new skillsets, and new ways to measure value. The question is not how many people it takes to run the system, but how much leverage each person can create.

This paper is written for decision-makers who want to stay ahead of that curve. Not to react later, but to prepare now.



1. FROM IMPULSE TO INVENTORY: A NEW KIND OF RETAIL JOURNEY

I watched The D-SoraKi, the Japanese freestyler winning the Red Bull dance finals on YouTube, he was wearing a pair of white Adidas. But everybody was wearing the white ones and I knew the Lionel Messi special editions came in Inter Miami pink. That was my impulse.

I didn't need them. But I wanted them. "*Milo, find me the pink Messi Sambas and make sure they're authentic, I'm in no hurry, pay 120 Euros or less*"

You see Milo's my personal Agent. It understands more than just the product. It knows my shoe size, my budget, where I usually shop, and my precise delivery instructions. It checked Amazon — overpriced. Adidas had them, but not in my size. Foot Locker was flagged for iffy reviews on fulfillment and I've never shopped there. Alibaba had some listings, but there were questions about authenticity. So the agent held the request. It didn't buy. It watched.

That intent stayed live waiting for the right combination of inventory, price, and trust. A few days later, it surfaced a new listing on Vinted. New with Tags. Verified seller. Good price and it acted fast. I didn't need to approve payment, Milo did the necessary.

Now this is normal, not magic. The old way - multiple tabs, shopper reviews, price comparison, delivery instructions - was more work than I wanted on a whim purchase. Shopping online meant stitching together a process by hand, filling in the gaps ourselves.

Milo changed that. It didn't automate a process. It absorbed it. It took on the research, the decision logic, the waiting, and the execution. Not in a rush, not driven by impulse, but with clarity and context. All I had to do was express what I wanted.

And here's where it gets interesting for the retailers and their suppliers. My request wasn't just about one pair of sneakers. It was a signal. A live expression of demand - precise, persistent, and structured in a way that machines can act on.

Now imagine that signal multiplied by thousands or millions. Retailers don't just see what sold. They see what people are actively looking for, what they're willing to pay, where and when they're ready to buy. They're not guessing. They're responding to declared intent. Not historical, but real-time.

My pink Sambas weren't just about me. This is how demand becomes visible — and how retail starts to think ahead, all the way back to the beginning of the supply chain.

That's not ecommerce. That's agentic commerce. We're already seeing the first signals. The shift is underway.


IMAGE GENERATED BY CHATGPT

2. UNDERSTANDING THE TECHNOLOGY – FROM AGENTS TO AGENTIC SYSTEMS

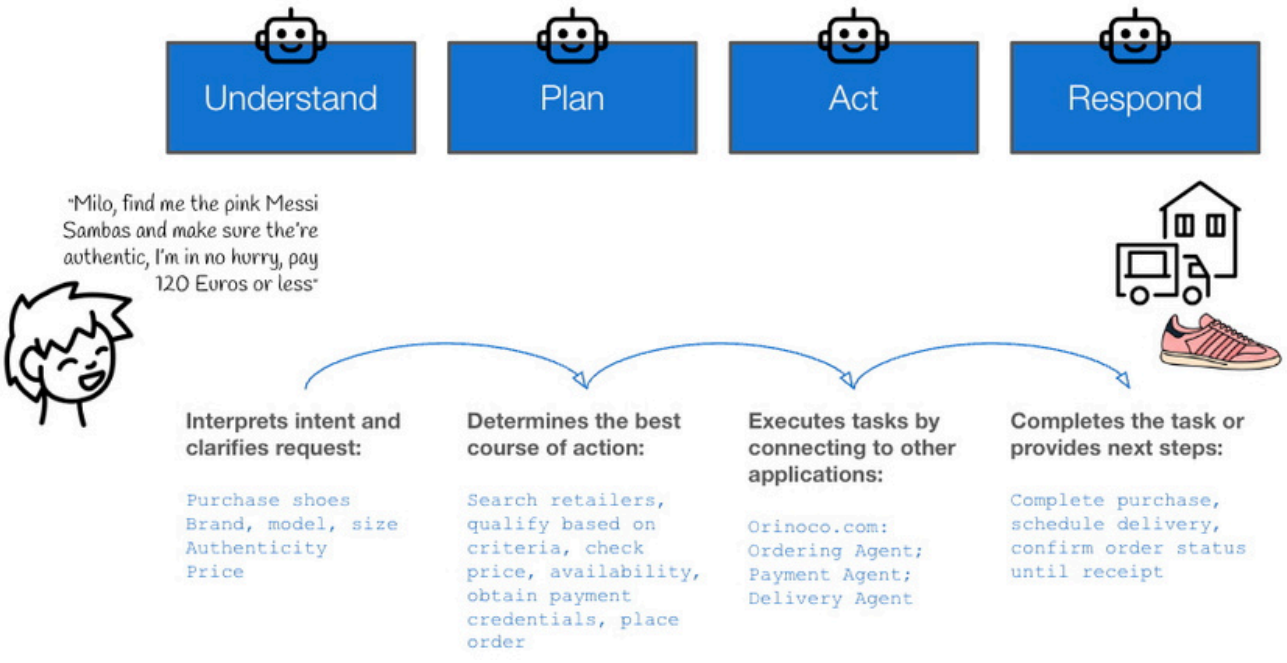
WHAT MAKES MILO WORK?

Milo, the agent that found my pink Sambas, is still imaginary. But the parts that make it work already exist. What's different now isn't the technology itself. It's how we put it together. In this section, we'll look at the building blocks behind personal agents like Milo and how they come together to create something much more powerful: agentic systems. These are not speculative concepts. They are design patterns ready to be implemented.

WHAT IS AN AI AGENT?

Today, we already have early forms of agents in use. A basic version of Milo might help with things like tracking a delivery, placing a reorder, or setting up a meeting. You give it a command, and it completes the task. It doesn't need a form to be filled or a sequence of clicks. It just gets it done.

This kind of AI agent operates within a limited scope. It can interpret a request, make a decision, and take action. That's what makes it different from older



software. It does not need constant direction. It understands enough context to move from instruction to execution.

But it still relies on the user to define each task. It does not yet know how to manage ambiguity, hold an intent over time, or pursue an outcome on its own

WHAT IS AGENTIC AI?

The Milo that found the pink Sambas operates at a different level. It doesn't wait for a task. It receives a goal.

"*Find the Messi Sambas in Inter Miami pink. Make sure they're authentic. I can wait. Keep it under 120 euros.*"

That instruction is incomplete so Milo has to interpret the intent, augment it with personal details like my shoe size, monitor availability, assess credibility, and act when the right offer appears. It holds the request in memory and works on it over time.

Agentic AI. can pursue goals without needing every step explained. It makes decisions based on changing conditions. It learns what matters by observing the results of its own actions. It reasons across tools and adapts when things shift.

These capabilities are no longer out of reach. Language models, contextual memory, tool integrations, and permission systems are already available. The question is not whether the pieces exist. It is how we assemble and manage them.


PHOTO BY MONICA FLORES ON UNSPLASH

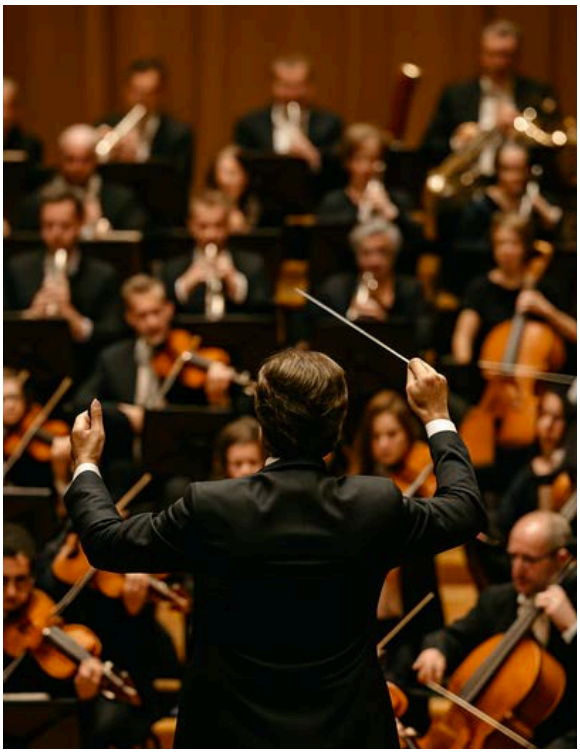
WHAT IS AN AGENTIC SYSTEM?

Milo, even at its most advanced, is not a single piece of software doing everything. It is an orchestrator. To fulfil its task, it calls on other agents.

One agent searches for products across marketplaces. Another evaluates trust based on seller

history. A third handles payment, security, and delivery constraints. Milo assigns these roles, coordinates their output, and ensures the work gets done.

This is what we mean by an agentic system. It is not one agent acting alone, but many working together. Each has a narrow responsibility. Together, they manage a wide set of variables, handle failure, and adapt as needed.



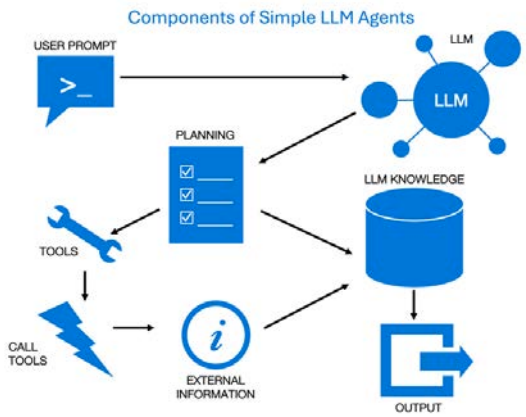
The technology to build these systems is already here. What comes next is the infrastructure to support them. Enterprises will need ways to supervise agent interactions, ensure compliance, and trace outcomes. The challenge is no longer theoretical. It is operational. And for those building agentic experiences, it is now a matter of readiness

LARGE LANGUAGE MODELS (LLMS)

When I told Milo to find the pink Messi Sambas, I didn't click through a product filter or enter a SKU. I spoke naturally. Milo understood what I meant, because it runs on a language model trained to handle real-world language, not just commands.

These models, known as large language models, can take what we say and extract meaning, context, preference, and nuance. They recognize intent without requiring rigid structure. They adapt to how we speak, not the other way around.

Over time, Milo learns from my requests. It starts to understand what matters to me. That learning might come from a personal data vault or from a history of past decisions. This is what allows a personal agent to feel helpful and human, even when the interaction is purely digital. It becomes conversational, not procedural. That changes everything.



MODEL CONTEXT PROTOCOL (MCP)

To be useful, Milo needs access to the services I use. But most of those services weren't built for agents. That's where the Model Context Protocol comes in.

MCP is a standard that allows agents to interact with real systems through structured context. If Amazon or a logistics platform exposes an MCP server, Milo can log in, retrieve product listings, read reviews, and check availability. This is all done securely, with the right permissions, and in a format that the agent can understand without guessing.

The idea is simple. If systems want to support agents, they need to speak in a way agents can understand. MCP is what enables that. It allows businesses to expose their functionality in a way that is precise, efficient, and agent-friendly. For users, it removes the need to explain or navigate. The agent does the work. The system responds directly.

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CopyEdit
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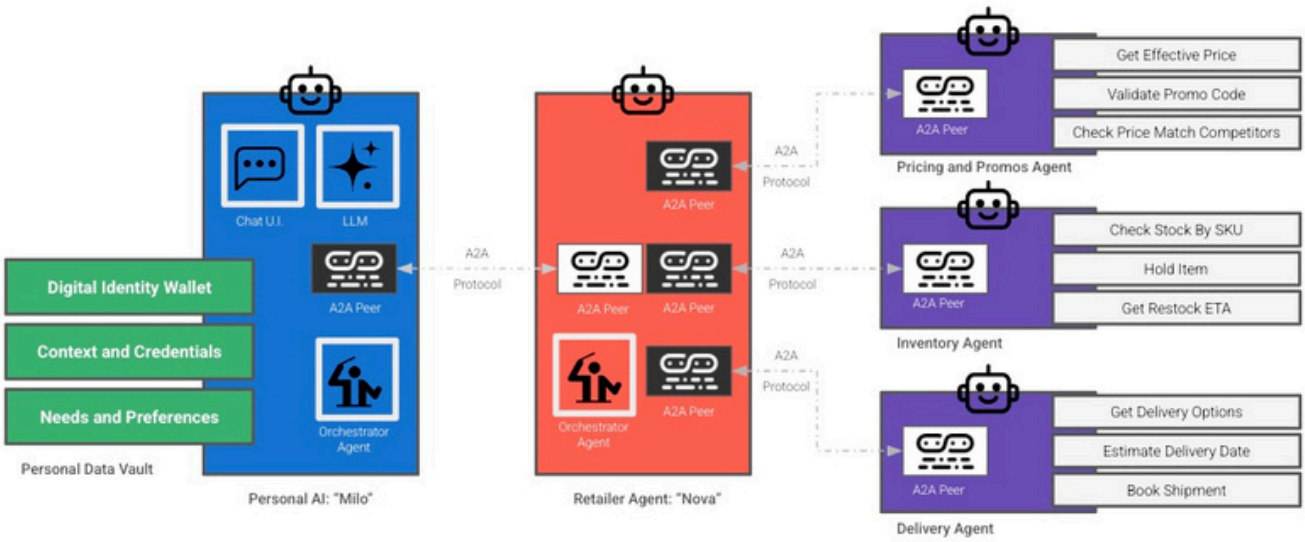
Machine readable request for Adidas Samba in Inter Miami Pink



'Milo' interacting with Retailer Agent 'Nova' that in turn calls a team of Service Agents

AGENT-TO-AGENT (A2A) INTERACTIONS

Not everything goes through APIs. Sometimes the systems Milo interacts with are agents too. Let's say Milo needs to arrange delivery for the sneakers. It contacts a logistics agent, one that understands capacity, routes, handling constraints, and delivery windows. The two agents do not need to know how each other works. They do not need access to each other's internal tools. They only need to communicate through a shared protocol.

That protocol is A2A. It defines how agents introduce themselves, share capabilities, exchange structured data, and work together to complete a task. This can happen in real time or over an extended period, depending on the complexity of the workflow.

For retailers and service providers, A2A opens the door to coordination at scale. Systems don't just serve users directly. They serve agents acting on behalf of users, and sometimes other businesses too. That shift is already beginning.

MULTI-AGENT WORKFLOWS

Earlier we described Milo as the orchestrator. In practice, that means activating a network of smaller agents with narrow responsibilities.

To research the pink Sambas, for example, Milo might trigger a retrieval-augmented generation pattern. The research agent pulls in fresh listings, forum chatter, and recent reviews, then distills it into a usable summary. That context updates the agent's working knowledge without retraining anything.

Other agents step in with different roles — trust scoring, payment handling, delivery setup. Each works on a slice of the problem. The orchestrator routes the flow and decides what happens next.

This structure keeps systems adaptable. It allows new capabilities to be added without rebuilding the whole stack. For enterprises, that means faster development, clearer oversight, and more resilience in the face of real-world complexity.

AGENTIC OPERATIONS

Building agentic systems is only part of the challenge. Running them at scale is where things get serious.

When a retailer begins to interact with thousands of personal agents, it also needs its own agents — systems that handle pricing, availability, negotiation, and fulfillment. These enterprise agents need rules, boundaries, and oversight.

This is where Agentic Operations comes in. It covers everything from context delivery and escalation paths to logging, tracing, and recovery. If an agent stalls or acts incorrectly, there must be a plan. If a customer's agent negotiates a deal, the enterprise agent must follow policy, respect thresholds, and escalate if needed.

Agentic Ops provides the framework for trust. It ensures agents behave consistently, understand their responsibilities, and can be observed when things go wrong. This is how businesses move from experimentation to full deployment. Without it, agents remain a prototype. With it, they become infrastructure.

A STACK FOR THE AGENTIC FUTURE

All of these components — the language layer, context protocol, agent-to-agent communication, modular structure, and governance — form a new stack.

This isn't an upgrade to existing systems. It's a shift in how digital interactions are designed. Retailers exploring agentic commerce aren't just adding a feature. They're entering a world where customers arrive with agents ready to transact, negotiate, and resolve.

The architecture is here. The components exist. What's required now is leadership to build for it, plan around it, and ensure the enterprise is ready when this becomes the default.

3. RETAIL JOBS AND ORGANIZATIONS WILL CHANGE

RETAIL'S NEXT OPERATING MODEL

Milo didn't buy the sneakers right away. It waited. It held my intent, tracked prices, and acted only when the right conditions appeared. To enable this seamless experience the retailer needed to be ready. They had to detect intent before purchase, forecast emerging demand, and decide whether a price drop would convert interest without hurting margin.

Serving a customer like Milo requires more than a product feed. It calls for real-time coordination across pricing, supply chain, and merchandising. The systems inside the business need to move as fast as the agents outside it.

This is where the real transformation begins. Most retail roles today are structured around human limits — narrow scopes, fixed cycles, and fragmented data. Agents lift those constraints. The question now is not how much work a person can manage. It's how we organize when the limits are gone. Let's start with the role of the buyer.

THE RETAIL BUYER: A ROLE BUILT FOR HUMAN LIMITS

PHOTO BY LINKEDIN SALES SOLUTIONS ON UNSPLASH

Most buyers manage a single category like fashion, dairy, or electronics because no one can track it all. The role depends on deep product knowledge, strong vendor relationships, and the ability to forecast using over 50 data points, each coming from multiple sources — daily sales, supplier feeds, promotions, market reports, stock positions, and more.

Even with digital tools, this data remains fragmented and inconsistent. Forecasting happens in cycles because analysis takes time and coordination takes longer. Each buyer can only optimize for a limited set of variables. They make decisions based on what they can see, what they can trust, and what they have time to act on.

To make this manageable, we bundle products into categories and assign them roles — hero, filler, entry price, premium. Buyers are given a defined slice of the assortment and a set of performance targets. This structure is not based on what is possible, but on what is humanly sustainable.

It has worked well enough to build the modern retail business. Entire organizations are structured around these limitations. Teams, workflows, planning systems, and performance metrics all align with what a human buyer can process and act on.

THE LIMITING FACTORS IMPACTING THE JOB OF THE RETAIL CATEGORY TEAM

THE SUPERHUMAN CAPABILITIES OF AGENTS

When agents take over the execution layer, something fundamental changes. They don't just work faster. They work differently.

A buyer looks at fifty data points across a single category. An agent can process fifty thousand, spanning every category, channel, and region. It does this continuously, not once a week or at the end of a season. Where the human eye scans a spreadsheet, the agent reads the entire retail landscape in real time.

It sees what's selling, where, and why. It watches customer signals — search trends, basket composition, price sensitivity — alongside operational signals like stock levels, inbound shipments, and fulfillment risk. It connects patterns that no single team could ever hold in view.

Agents do not need to specialize. They are not confined to a department or domain. They move between categories, adjust to local trends, and track overlapping signals. This gives them the ability to detect early shifts before they show up in KPIs.

Forecasting no longer needs to be locked to a calendar. It can update hour by hour, even minute by minute. Adjustments — to pricing, to replenishment, to promotion — can happen without a meeting, a spreadsheet, or a delay.

This isn't about speeding up a manual process. It's about removing the limits that defined how the process worked in the first place. Once those limits are gone, the work itself begins to change.

FEWER BOTTLENECKS, MORE POSSIBILITY

If an agent can do what ten buyers once did, what happens to the team?

When agents take over execution — monitoring, reacting, recalculating — human effort is no longer tied to volume. A single person, equipped with agentic tools, can operate across multiple categories, manage more variables, and respond in real time. The constraint is no longer bandwidth. It is clarity of judgment.

This doesn't eliminate the role. It elevates it. Human buyers are freed to make calls that agents cannot. They can interpret broader signals, set direction, shape assortment strategy, and coordinate across teams and partners. The tools do the running. People set the destination.

Headcounts may shift. Teams will be smaller in some places and larger in others. But value creation does not go away. It moves. The organizations that thrive will be the ones that redesign around leverage — where the work humans do is multiplied by what agents make possible.

The opportunity is not to do the same work with fewer people. It is to pursue work that was previously out of reach. New roles will emerge, built around agility, creativity, and orchestration. The challenge for leadership is to make space for that shift — and to prepare the organization for what comes next.

WHAT COMES NEXT

THE IMPLICATIONS FOR LEADERS

Agentic commerce is not a theoretical model. It's a structural shift in how demand is expressed, matched, and fulfilled. This shift affects more than just consumer interfaces. It changes how internal systems, external partners, and data flows align. The goal of this paper was not to advocate for immediate implementation, but to prompt serious thinking. Are you preparing your organization for a world where intelligent agents represent buyers, partners, and suppliers?

WHERE THE TECHNOLOGY STANDS

At the time of publication, the core technologies — Model Context Protocol (MCP), Agent-to-Agent (A2A) communication, and registries like NANDA — are still evolving. Personal agents like ChatGPT and Gemini already operate in limited capacities. Voice commands can lead to purchases. Payments can be tokenized. But enterprise-scale commerce requires more: traceability, fault tolerance, recoverability, and secure interoperability. The tools are not enterprise-ready yet. But they will be, and they are improving quickly.

WHAT IS ALREADY POSSIBLE

Agents today can compare prices, evaluate reviews, and fill out purchase flows. Some interact with screen elements, others can act through APIs. Wallets are beginning to hold verifiable credentials. Payment agents are becoming capable of completing secure transactions. These capabilities exist — imperfect but usable — and they are showing up inside organizations through employees and consumers. Many companies are already engaging with agents, even if unintentionally.

A DIFFERENT KIND OF READINESS

Traditional tech adoption follows a steady curve. Build the tool, optimize the process, harden the practice. Agentic commerce breaks that cycle. The technology changes fast. Capabilities extend into new areas monthly. There is no fixed state to build around. Instead, readiness becomes a habit: the ability to act with confidence even as the foundation moves. Agentic systems will impact not just marketing and merchandising, but fulfillment, support, and planning. Just as SEO and SEM forced continuous adaptation, agent-based commerce will demand the same — across every function.

WHAT TO DO NEXT

The right approach depends on where you are. If your systems are modular and your data is clean, start experimenting. Structure your product data, build agent-ready interfaces, and test how systems respond to agent traffic.

If you're dealing with technical or operational debt, invest there first. Modernize your architecture. Push for standards. These actions create near-term value and long-term readiness.

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If you take a late-mover stance, stay alert. Watch the metrics. Track adoption of wallets, agent-based referrals, and vendor-facing agent interfaces. Being ready to respond quickly is still a form of leadership

WHAT TO DO NEXT

Three indicators signal that agentic commerce is gaining ground:

Digital Wallets Go Mainstream
Once 30% of mobile users adopt wallets that store verifiable identity and preferences, agents will have the foundation to act autonomously.

Search Attribution Begins to Blur
A 10 to 15 percent decline in SEO/SEM traffic, replaced by "unknown" or direct agent-originated sources, signals a change in discovery behavior.

Vendors Launch Agent Interfaces
When suppliers and logistics providers begin offering agent-compatible APIs, the infrastructure is no longer experimental — it is operational.

You do not need to jump in blindly. But you cannot afford to look away. If you want help figuring out what readiness looks like in your context, let's talk.

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Gam Dias is one of the leading voices on Agentic AI. With more than two decades in data and technology strategy, he now advises global organizations on how to prepare for a future shaped by intelligent agents.

Gam is co-founder of Hubbl Process Analytics, a process mining platform built for the Salesforce ecosystem, helping companies get automation-ready. Previously, he led data strategy at Aviva and designed the IBM AI for Leaders program, guiding executives to apply AI responsibly and at scale. His work sits at the intersection of business transformation, responsible innovation, and real-world AI deployment.

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To Kim is the go-to technology advisor for a growing list of ecommerce businesses and their vendor networks. Known for his clear, pragmatic guidance, he helps organizations navigate change across SaaS, analytics, and enterprise architecture.

First Retail is a specialist consultancy focused on data and technology transformation. From Silicon Valley platforms to global industrials and high-growth startups, the team at First Retail has designed scalable digital roadmaps, delivered enterprise-grade infrastructure, and led applied data science projects. Clients benefit from Big 5 experience delivered by senior experts, without the overhead.

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