

Loblaw Companies Limited is Canada's largest retailer and a leading food and pharmacy provider. Operating over 2,400 stores under banners including Loblaws, Shoppers Drug Mart, No Frills, T&T Supermarket, and Real Canadian Superstore, Loblaw serves millions of Canadians daily. The company is also a leader in loyalty (PC Optimum), financial services (PC Financial), and apparel (Joe Fresh), with a workforce of over 220,000 people.

CASE STUDY

How Canada's Largest Retailer Is Scaling AI Responsibly with Shakudo

220K+

employees at Canada's largest retailer, now served by AI built in-house

1ST-PARTY

AI apps built inside Loblaw's own infrastructure, with full data sovereignty

GOVERNED

AI environment, centralized to replace siloed toolchains and duplicated work

Loblaw Companies Limited (TSX: L) is Canada's largest retailer, operating over 2,400 corporate and franchise stores under some of the country's most recognized banners: Loblaws, Shoppers Drug Mart, No Frills, T&T Supermarket, Real Canadian Superstore, and Maxi. With over 220,000 employees and a presence in every province, Loblaw touches the daily lives of millions of Canadians through grocery, pharmacy, loyalty (PC Optimum), financial services, and apparel. The company has long been a quiet technology leader in Canadian retail, running one of the most sophisticated supply chain and logistics operations in the country.

In May 2026, Loblaw publicly announced its partnership with Shakudo, marking a strategic decision to standardize and accelerate how the company builds, deploys, and governs AI across its enterprise. The partnership reflects a broader shift happening across every large, data-rich organization: the realization that the barrier to AI adoption is no longer the availability of models or the ambition of teams, but the infrastructure and governance layer that sits between a promising prototype and a production-grade, auditable system.

THE CHALLENGE: AI AT RETAIL SCALE DEMANDS MORE THAN AMBITION

Loblaw's Digital and Technology & Analytics teams had no shortage of AI ambition. Across the organization, teams were building machine learning models for demand forecasting, personalization engines for PC Optimum, pharmacy workflow automation, and supply chain optimization. But the path from a working model to a governed, production-ready application was fragmented and slow.

Each team was independently assembling its own toolchain: different ML frameworks, different deployment pipelines, different approaches to data access, identity, and secrets management. The result was technical duplication at scale. Engineering hours

that should have gone into solving business problems were instead spent reinventing core plumbing — standing up environments, wiring authentication, configuring CI/CD, and navigating security review processes that were designed for a different era of software delivery.

"Shakudo's platform allows our teams to focus on solving real problems rather than reinventing core plumbing. It enables us to scale our agentic AI capabilities responsibly across the organization."

Charu Pujari

Senior Vice President, Engineering and AI, Loblaw

Layered on top of the fragmentation challenge were three additional pressures unique to a retailer of Loblaw's scale and regulatory exposure. First, **data sovereignty**: Loblaw handles enormous volumes of sensitive customer data through PC Optimum, Shoppers Drug Mart pharmacy records, and PC Financial. Any AI platform had to guarantee that data never leaves Loblaw's own infrastructure — no third-party data residency questions, no ambiguity about where models are trained or where inference runs. Second, **governance at scale**: with thousands of potential AI applications across dozens of business units, Loblaw needed platform-level audit trails, lineage, and access controls that work consistently regardless of which team builds what. Third, **speed without compromise**: the business was moving faster than the infrastructure could support, and the gap between prototype and production was widening, not shrinking.

WHY LOBLAW CHOSE SHAKUDO

Loblaw evaluated Shakudo against this specific set of constraints rather than against a generic AI platform checklist. Three capabilities set Shakudo apart.

The first was **infrastructure sovereignty**. Shakudo runs entirely within Loblaw's own cloud environment. There is no data exfiltration, no external SaaS dependency for the core AI runtime, and no ambiguity about data residency. For a company handling pharmacy records, financial data, and the personal shopping behavior of millions of Canadians through PC Optimum, this was non-negotiable. Shakudo provides the AI gateway, model endpoints, orchestration, and compute layer inside Loblaw's governance boundary, with network policies, audit trails, and lineage built into the platform from day one.

The second was **a centralized, consistent environment** that eliminates duplication. Instead of each team assembling its own stack, Shakudo gives Loblaw's Digital and Technology & Analytics teams a shared substrate with identity management, secrets handling, data access controls, CI/CD, observability, and integration with the best open

and closed source AI tools all pre-configured. New applications plug into this environment immediately rather than spending weeks re-creating what another team built last quarter.

The third was **tool-agnostic flexibility**. Loblaw's AI landscape is inherently heterogeneous. Different teams use different frameworks, different model providers, and different data stores. Shakudo's architecture does not force a single-vendor commitment across the stack. Instead, it orchestrates whatever tools each team needs — frontier commercial models for high-reasoning tasks, open-weight models for cost-sensitive workloads, and specialized frameworks for domain-specific applications — while keeping governance, access control, and audit consistent across all of them.

"We needed a platform that gives our teams the freedom to use the best tools available while maintaining the governance and oversight that a company of our scale requires. Shakudo delivers exactly that."

Charu Pujari

Senior Vice President, Engineering and AI, Loblaw

THE SOLUTION: ONE OPERATING SYSTEM FOR AI ACROSS THE ENTERPRISE

With Shakudo in place, Loblaw has built a unified AI operating environment that serves as the foundation for all AI development across the company. The architecture is designed around a simple principle: teams should spend their time building applications that solve business problems, not managing infrastructure.

The platform provides a centralized runtime where Loblaw's engineers can build and deploy first-party AI applications with full governance built in by default. When a team develops a new demand forecasting model, a pharmacy workflow agent, or a supply chain optimization service, it deploys into the same governed environment with the same identity controls, the same audit trail, and the same CI/CD pipeline. The result is a dramatic reduction in the time and effort required to move from prototype to production.

Loblaw is using this foundation to pursue several strategic AI initiatives across the business:

Retail operations and supply chain: AI-powered demand forecasting and inventory optimization across 2,400+ stores, with models that account for regional preferences, seasonal patterns, and real-time supply chain signals. The deterministic requirements of

supply chain logistics — where a routing decision directly affects whether product reaches the right store at the right time — demand the kind of auditable, governed AI execution that Shakudo provides.

Customer experience and personalization: Enhanced personalization across the PC Optimum loyalty ecosystem, connecting purchase history, preferences, and behavioral signals to deliver more relevant offers and experiences — all processed within Loblaw's own infrastructure with no data leaving the governance boundary.

Pharmacy and healthcare: Workflow automation and intelligent assistants for Shoppers Drug Mart pharmacy operations, where regulatory compliance and patient data protection are paramount. Shakudo's infrastructure sovereignty model ensures that sensitive healthcare data is processed entirely within Loblaw's controlled environment.

Agentic AI at scale: Loblaw is building toward an agentic AI operating model where autonomous agents handle increasingly complex workflows across the business. Shakudo's platform provides the orchestration layer, AI gateway, and governance framework needed to deploy agent swarms responsibly — with human oversight designed into critical decision points and every agent action recorded in an immutable audit trail.

GOVERNANCE AS A FEATURE, NOT A BOTTLENECK

For a company of Loblaw's scale and regulatory exposure, governance cannot be an afterthought bolted onto AI initiatives after the fact. It has to be woven into the platform layer so that every application, every model, and every agent inherits the same controls automatically.

Shakudo provides this through several integrated capabilities. **Platform-wide audit trails** capture every model invocation, data access event, and deployment action, creating the immutable record that compliance and security teams require. **Data lineage** tracks how information flows through AI pipelines from source to output, critical for regulatory reporting and for building trust with customers whose data powers these systems. **Network policies and access controls** ensure that sensitive data stores — pharmacy records, financial data, personally identifiable information — are accessible only to authorized applications and users, with policy enforcement happening at the infrastructure layer rather than depending on application-level implementation.

This approach transforms governance from a drag on AI adoption into an accelerant. Teams move faster because the security review process is streamlined — the platform guarantees a baseline of controls that would otherwise require manual verification for

each new application. And leadership gains confidence to approve more ambitious AI initiatives because the risk management framework is built into the foundation rather than assessed case by case.

LOOKING FORWARD

Loblaw's partnership with Shakudo positions the company at the forefront of responsible enterprise AI adoption in Canada. The roadmap extends naturally from the foundation already in place: more first-party AI applications replacing expensive SaaS seats, more business units enabled to build on the shared platform, and more agentic workflows deployed with the governance and oversight that a company serving millions of Canadians requires.

The pattern is instructive for every large enterprise wrestling with the same challenge Loblaw identified. The barrier to AI adoption is no longer ambition, talent, or access to frontier models. It is the infrastructure and governance layer that determines whether AI applications can move from prototype to production safely, quickly, and economically. Shakudo is the operating system for data and AI that closes that gap inside your own infrastructure, with deep controls for audit, lineage, identity, and network policy already in place. Kaji is the autonomous AI agent that runs on top of it, connected to your data, equipped with the best open and closed source tools, and governed end to end through the Shakudo AI gateway.

If your organization is ready to move beyond AI experiments and build a production-grade, governed AI capability that scales with your business, the next step is straightforward. **Get a demo of Shakudo and Kaji today** and see what responsible AI at enterprise scale looks like running inside your own four walls.

GET IN TOUCH WITH US

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