



How Canadian Tire leveraged the potential of customer data with AI

Decentralized data re-centers focus on customers for one of Canada's most iconic and trusted retailers.

■ The better the question

How fast could you drive business without a data roadblock?

Advanced analytics and artificial intelligence changed a two-lane road into an information superhighway.

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In 1937, Toronto-based Canadian Tire Corporation (Canadian Tire) surprised and delighted its customers with a novelty: clerks on roller skates. These “fillers,” as they were called, were able to fulfil customers’ catalog orders just a little faster on wheels.

Innovative customer service has been the primary driver of Canadian Tire’s business model for more than a century, as the company has grown from a single tire shop to Canada’s leading all-purpose retailer. With more than 1,700 locations across three industries, 13 recognizable brand banners, and 34,000 employees, Canadian Tire has expanded to provide general merchandise, sports apparel and gear, automotive products, real estate, and credit card offerings.

In 2021, Canadian Tire developed a strategic plan to elevate its customer-centric culture through a business transformation powered by data insights. The iconic Canadian company recognized an opportunity to bolster its brand position by sharpening its focus on the customer through data quality, accessibility, analytic capabilities and, ultimately, effective business application.

“We knew we had the customer data available to drive our entire business farther and faster,” says Jane Nakamachi, SVP, Business Architecture at Canadian Tire Corporation. “What we wanted were more sophisticated capabilities to sort, request and grant access to our business leaders who need specific data sets to grow their areas of the enterprise.”

Priority target areas included clearer data sourcing and ownership, advanced analytics and artificial intelligence (AAAI) capabilities, and an optimized technology infrastructure.

Previously, only a limited number of people were able to generate and provide the various reports needed for analysis, planning and decision-making. Leaders saw a chance to open the information pipeline to accelerate queries and increase data accessibility for Canadian Tire’s wide range of business units and stakeholders.

Canadian Tire asked Ernst & Young LLP (EY) teams to create a plan to help modernize all of its customer data environments – in a deliberate shift from over-centralization to a more decentralized, business-embedded data model. In addition to improving visibility and operational efficiencies, the core objective was to drive growth and facilitate customer personalization across its 13 banners.



Mapping to the future with data federalization

Customer data puts power steering in the hands of those driving the business.

To help Canadian Tire improve its customer data management, EY teams launched a thorough data maturity assessment. Focus areas were data management processes, data accessibility and governance practices, business intelligence or Microsoft Power BI proficiency, and AAAI capabilities.

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During the 12-week strategy phase, EY professionals used their findings to chart a three-year roadmap to Canadian Tire's future state. The route was thoughtfully guided by the company's distinct culture and business needs, rather than a go-to solution for general business and data transformations.

Data federation was a top priority. EY teams conducted an inventory of Canadian Tire's customer data, holding some 40 discovery meetings with more than 100 stakeholders over the course of three months. Critical questions included how data was entering the company's current system, where it was being captured and stored, and who and what programs were generating reports based on that data.

Process mapping revealed nearly 500 data paths with numerous redundancies, resulting in multiple copies of similar customer data sets bogging down the entire system. There were also notable gaps in the data and inconsistencies in how it was sourced and provisioned by stakeholders. EY teams identified 165 data processes to be refined for Canadian Tire's future state operating model.

“With a massive volume of retail business being transacted and multiple brand banners to consider, this was an energizing challenge for EY teams to take on,” says Alex Mohelsky, EY Global Technology Strategy Lead and Chief Innovation Officer.

“We brought in an exceptional team with knowledge ranging across data management, AI and analytics, cloud transformation and change management - we were able to address every aspect successfully while working alongside our Canadian Tire counterparts.”

To strategically leverage data as a competitive advantage, the EY team recommended Canadian Tire realign and configure its existing data architecture and technology investments in a data mesh construct. The proposed platform, built on the Microsoft Azure stack, would unite a distributed domain-driven architecture, self-service design and product focus, helping Canadian Tire cultivate synergies among the legacy silos.

The new data governance model places decision-making power with a collective federation of domain owners, granting localized autonomy to those who use the data to drive business forward. Shared standards and evaluation metrics were created to address regulatory compliance oversight for a healthy data ecosystem.

One of the most notable outcomes of the six-month transition from centralized to domain-based data architecture is a new, internal data and analytics organization for Canadian Tire. Based on the EY teams' recommendation, Canadian Tire's Chief Data Officer and executive leadership made a significant investment in head count as well as technology infrastructure, spearheading the recruitment of nearly 100 data scientists and managers with experience in this emerging field. The expanded Canadian Tire team will oversee data governance and empower Canadian Tire's various business users to access what they need, creating a data-driven culture across the entire organization with AAAI serving as the engine.

Rather than abruptly shifting all oversight of data and analytics to this new business unit, Canadian Tire extended the EY teams engagement for a full year to facilitate a collaborative innovation lab, where Ernst & Young LLP and Canadian Tire data teams worked side-by-side to build out the new data and analytics architecture. The two teams paired up according to functions and roles so that EY professionals could introduce the system to the Canadian Tire team through structured onboarding, training and coaching. More than 10 experienced EY mentors worked directly with 20-plus Canadian Tire executives to provide knowledge, share experience, and position the new data organization for success.

Data running at full throttle

A tuned-up data strategy helps Canadian Tire continue its drive for exemplary customer service.

A decentralized data model, supported by a smarter technology infrastructure and restructured governance, has unleashed the potential of customer data for Canadian Tire's business growth. Agile methodology helped coordinate, support and govern the more decentralized approach to foster operational and business success for the 24 business units engaged in the transformation.

New dashboards on the Microsoft Power BI platform enable business domains to harness data in more agile ways. Banners can now use this data more effectively to analyze product performance by stock keeping unit (SKU), applying the results to determine what items should be promoted where, when and how.

For example, Canadian Tire's Triangle Rewards Program is now strategically calibrated to match products with buyer patterns, exclusive deals and future marketing potential by capturing high-volume, real-time insights into customer interaction and purchasing trends across digital channels.

"Retail is among the most competitive of all the industries we work with, and Canadian Tire is in the upper echelon with multiple brands, locations, online outlets and customer incentive programs," says David McQueen, EY Canada Managing Partner, Consulting; Member, EY Canada Executive Committee. "Data management is of paramount importance to large retailers like this. We needed to bring the strength of experience and current knowledge to get their data models right."

Phase 1, streamlining Canadian Tire's customer data management, led to an encore. EY teams are now supporting a transformation of Canadian Tire's product data management.

Canadian Tire may have traveled miles from its original tire store, but the company has never lost sight of its purpose - serving a loyal customer base with speed, stability and forward vision.

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