




Building a Multi-Agent AI Ecosystem to Transform Churn Strategy for a Leading Telecom Provider

Bringing together data science, network operations, customer service, and business units to drive measurable, cross-enterprise churn reduction.

brillio



A major U.S. telecom provider embarked on a strategic initiative to enhance churn prediction and boost retention across multiple business units. Facing churn driven by diverse factors—including competition, network performance, customer support, and value-based considerations—the company recognized the need for a unified framework to align more than 13 separate churn-reduction programs. The solution required consolidating causal modeling, prescriptive insights, AI-enabled BI, and agentic automation into a single, scalable program – one capable of identifying churn drivers, operationalizing insight-to-action workflows, and enabling reusable AI assets across different business segments in service provider landscape. By fostering alignment and instituting a cross-functional operating model, the organization positioned itself to significant impact in revenue through stronger churn outcomes, higher offer acceptance, and improved retention efficiency.

Unlocking Strategic Value Beyond Revenue

The program was designed not only to reduce churn but to unlock broader strategic value. Through cross-BU alignment, the churn-reduction approach was standardized, enabling deeper collaboration across data, AI, and business teams. The initiative delivered 32+ reusable churn-focused AI assets built natively within the client ecosystem, supported by thought-leadership sessions and cross-team knowledge exchanges. Additionally, large-scale enablement – such as webinars for ~500 employees and agentic AI workshops for ~300 – ensured talent across the organization could understand and influence key retention levers.

Driving business
impact while
empowering
teams with
reusable AI assets
and shared
retention levers.

Uncovering Churn Drivers with Causation Intelligence

The first phase of the initiative focused on identifying the true drivers of churn using Causation Intelligence. Brillio implemented a Tech Acceleration Engine that automated AI science workflows and enabled self-service, governed BI for scalable and prescriptive insights. Causal ML models were introduced to isolate high-risk deciles, top churn-prone centiles, and the underlying drivers across customer service, network behavior, and value-based segments. This created a new operating model that shifted teams from intuition-led decisions to measurable, model-driven impact on churn.



Establishing the scientific foundation for accurate prediction and meaningful remediation.

Operationalizing Retention Through Agentic Acceleration

Once the churn drivers were identified, the organization moved into execution by deploying specialized Agentic AI pods focused on the highest-impact, customer-prioritized use cases. These pods automated ticket triage and resolution, accelerated billing issue handling, surfaced proactive network insights, and delivered prescriptive recommendations. The results were significant: ticket volumes dropped by 30–50%, turnaround times for complex service interactions improved, and support costs decreased by 20–30%. In addition, self-service capabilities, and natural language BI empowered teams with rapid access to churn insights and actionable recommendations.

Deploying
specialized
Agentic AI pods
to act on churn
drivers across
functions.

Building an Agent-First Architecture for Scale, Reuse, and Governance

Brillio developed an Agentic AI platform designed to automate data management, unify user interfaces, and accelerate adoption across business units. At the core of this platform was a centralized **Agentic Marketplace & Control tower** providing teams with a single view of all AI agents with performance insights created across BUs. Through this foundation, the provider advanced toward a scalable, long-term architecture capable of supporting multiple agents and data-intensive workloads. By leveraging Brillio's frameworks, agents, methodologies, and user experience into the service provider's Agentic platforms, the organization established a robust ecosystem for sustainable AI-driven growth.



Creating a governed platform to support multi-agent workflows and cross-team interoperability.

Scaling Talent Through a Purpose-Built Enablement Engine

To scale value delivery, Brillio and the provider introduced a structured talent ramp-up model designed to onboard subject matter experts (SMEs) rapidly and effectively. More than 20 experts were brought in during the initial phase, followed by additional SME cohorts aligned to each business segment—Consumer, Business, and Network.

The onboarding journey was comprehensive, including:

Telecom Training – building domain expertise through interactive webinars

Account Overview – aligning teams on account-specific context and operating norms

Agentic AI Knowledge Transfer – deep dives into the provider’s Agentic AI platform and multi-agent workflows

Tech Training – tailored, instructor-led labs focused on the customer’s technology stack

This model was reinforced by structured learning paths, dedicated mentorship, centralized LMS resources, and peer-driven community forums. Together, these elements ensured sustained capability development and consistent performance across all pods

Ensuring rapid onboarding and consistent delivery through telecom, account, AI, and tech training tracks.

Driving Impact Across Business Units

The unified program introduced agentic capabilities across the telecom provider's core business units:


Consumer: Automated reactive ticket triaging, proactive order monitoring with auto-resolution, billing inquiry automation, and call center support for network queries. These initiatives improved customer experience while reducing support costs.

Business: Streamlined the opportunity-to-order journey and lowered operating expenses through agent-managed processes

Network: Enabled intelligent diagnostics for outage analysis and recommendations, implemented Agentic Lease Automation, and optimized vendor and operational workflows.

In addition, the program established a robust data quality framework and advanced churn prediction models to enhance data reliability and deliver rapid churn insights.

Collectively, these initiatives delivered measurable impact—driving significant cost savings and strengthening retention outcomes across the enterprise.



Delivering
consistent
outcomes through
agent-enabled
use cases across
AI&D, VCG, VBG,
and NS.

ABOUT BRILLIO

Brillio is a digital technology services company that drives AI-first engineering and design-led experiences for global enterprises. Born digital in 2014, its consulting-led services span Customer Experience, Data & AI, Product Engineering, and Digital Infrastructure. With an industry-leading NPS of 71, Brillio accelerates time to market through its proprietary BrillioOne.ai platform, powered by AI-ready talent with deep domain expertise. Brillio is the official Digital Transformation Partner and the official Data and AI Services Provider of Atlassian Williams Racing. Brillio partners with leading technology providers including Microsoft, AWS, Google Cloud, Salesforce, Adobe, Databricks, and Snowflake and operates with 6,000+ “Brillians” across 15 global delivery centers. Consistently recognized as a Great Place to Work® since 2021, Brillio blends innovation, talent, and purpose to deliver measurable outcomes for clients and fulfilling careers for employees.



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