

BIND: Bridging Intelligence, Networks, and Digital Twin

Bridge data silos across existing and new network technologies with GenAI-enabled inventory federation and digital twin for streamlined operations.



The solution:

This Catalyst aims to provide CSPs with a single comprehensive view of their network operations. The solution under development is using generative AI and digital twins to enable CSPs to federate data from multiple sources, automate more processes and improve efficiency, leading to quicker, more reliable interactions with end users, ultimately boosting customer satisfaction.



Addressing the challenge:

Autonomous Networks Advancement: Achieving Level 4+ autonomy requires a strong data foundation (via dynamic federated inventory) and an agentic layer for zero-touch operations.

AI-Powered Integration: Using Digital Twins and Agentic AI to bridge data and operational silos, enabling proactive and intelligent network/service management.

Proactive Service Management: GenAI-enabled Network Agents autonomously identify, simulate, and resolve issues using rich data and knowledge bases — enhancing operational efficiency and customer experience.



Direct benefits for CSPs and vendors include:

- **AI-native Operations:** A shift from manual troubleshooting to predictive, self-optimizing systems reduces downtime, human error, and operational cost.
- **Intent-based Automation:** Users and operators can interact with the network using natural

This Catalyst is a critical step toward modern, resilient, and autonomous network operations. It ensures CSPs can deliver consistent, high-quality services while managing complexity and cost through intelligent, scalable automation. language interfaces, simplifying service provisioning and support.



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Business impact:

Cuts ops costs by **30%**
boosts resilience **80%**
speeds time-to-market **60%**
enables AI-driven predictive service delivery

Champions:



Participants:

