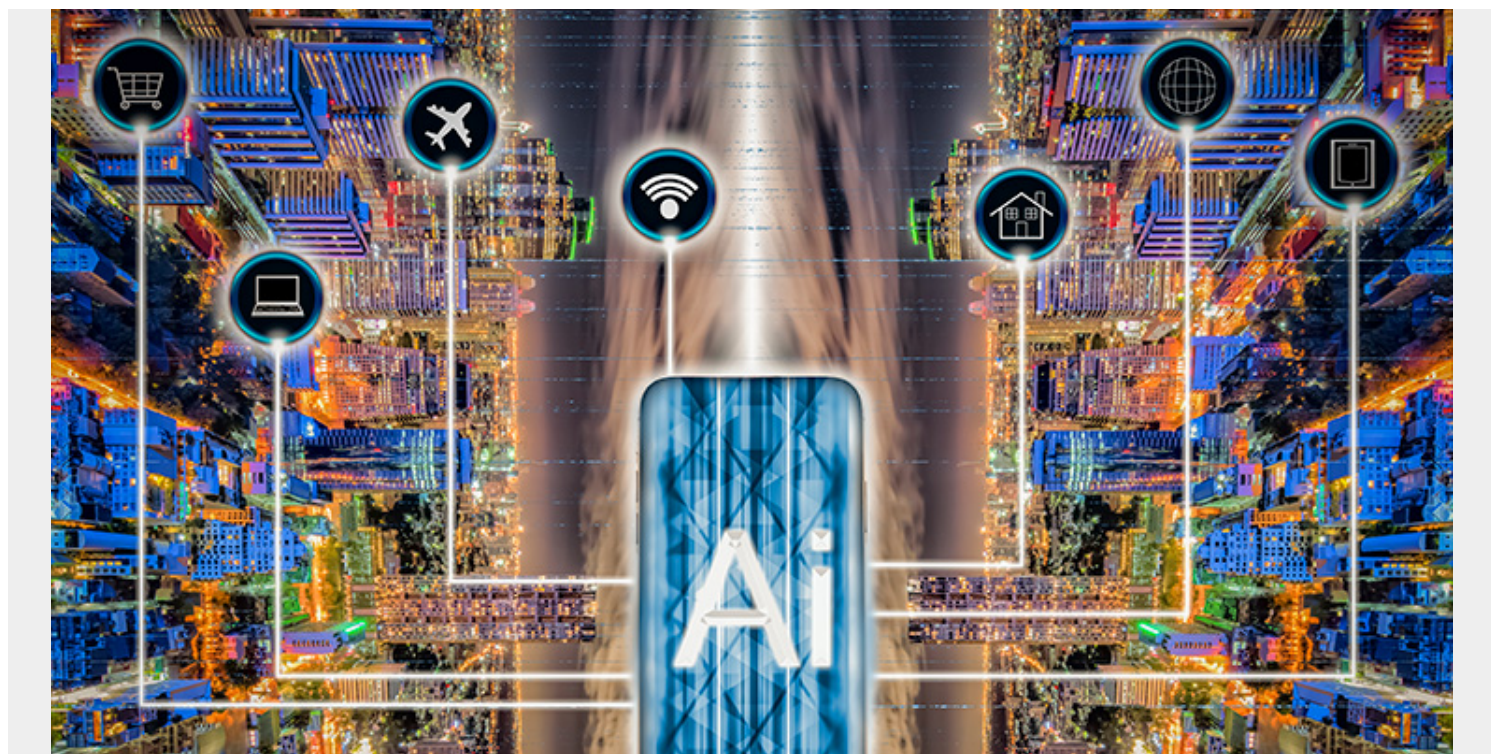# DELIVERING TELECOMMUNICATIONS OF THE FUTURE WITH AGENTIC AI

Today's communication service providers (CSPs) are facing an inflection point. With customers demanding more for less, greater competition from traditional and new players, and core services becoming commoditized and causing margin erosion, CSPs are looking to increase their revenue streams by launching new and innovative services and reduce costs while preparing network operations to handle even more data-intensive technologies of the future. Additionally, telecommunications companies need to deliver a differentiated customer experience with faster, easier, more personalized customer support. To do that, many leading CSP are optimizing and automating their IT operations (ITOps) with agentic AI to increase their organizations' level of maturity in reference to the [TMF AN (Autonomous Network) Framework](#).

5G networks: The first wave of change for telecommunications service delivery

5G networks have revolutionized the telecommunications industry. They have also had an impact on other industries including healthcare, transportation, and manufacturing. Use cases include becoming the backbone for smart traffic systems deployed in major metropolitan areas, enabling robotic automation in manufacturing, and allowing ultra-low-latency implementations like remote surgeries and self-driving rideshare vehicles. 5G networks have also changed how CSPs need to structure their infrastructure to deliver services—from adopting cloud platforms and cloud-native technologies and new, open digital architectures to achieve the economies of scale for bandwidth-

intensive use cases and faster, more reliable, redundant, and glitch-free networks.

Customers are demanding more

As telecom providers support new and innovative technologies with 5G networks, customers want a frictionless, personalized experience with zero trouble, zero touch, and zero wait. To keep up, telecoms must deliver more proactive and responsive customer service, including:

- **Proactive issue resolution:** Proactively monitor network performance and address potential issues before they impact customers.

- **Accelerate resolution times:** When incidents cannot be avoided, or when IT and network configuration changes are necessary, the time required to resolve the incident (mean time to repair, or MTTR) or perform the change should be reduced as much as possible.

- **Faster response times:** Reduce wait times for customer support interactions and provide quick resolutions.

- **Clear communication:** Inform customers about service disruptions or planned maintenance to build trust.

Autonomous, customer-centric operations are quickly becoming the norm

The speed and methods of customer support have changed. Calling into a service center and speaking to a human (who probably needs to work with another team to resolve the issue) takes too long and is longer acceptable. Instead, today's telecom customers expect:

- **Self-service options**: Online tools, mobile applications, and self-serve kiosks that allow independent account management and resolution of common issues.

- **Chatbots and AI-powered assistants**: AI-powered chatbots using natural language that can handle routine inquiries and provide instant support 24x7x365.

- **Support across multiple channels**: Multi-platform support options that include email for non-urgent issues, social media direct messages, and even traditional telephone support for customer who still want a human to help them.

The future of telecommunications operations is agentic AI

Instead of inefficient, manual processes that involve form completes and emails, agentic AI can meet ITOps end users and customers where they are, delivering a single, integrated hub for all requests, and allowing engagement through platforms they're already familiar with, like Teams, Slack, or social media channels.

For IT and network operations center (NOC) staff stuck in a "swivel chair" rut maneuvering through time-consuming, multi-system processes, agentic AI offers smart, agent-like assistants that free up staff to focus on critical, high-value tasks instead of repetitive actions.

In many current environments, collaboration is impeded by silos, with systems of record

disconnected from communication channels. Agentic AI can break down these barriers by integrating systems of record with communication tools. This creates a collaborative, adaptive environment where information flows smoothly.

Another issue that could be impeding efficiency is the restriction of data analysis to a few individuals, with insights detached from IT and network operations staff, who need to wait in line to get important insights. Agentic AI democratizes data access, enabling team members to ask questions, create dashboards, and explore complex queries.

BMC HelixGPT is the agentic AI solution for telecoms

BMC HelixGPT AI agentstakegenerative artificial intelligence (GenAI)beyond the "call and response" mechanismfamiliar to manyusersfrom theirearly interactions with GenAI. BMC Helix now has agents that work autonomously across areas that include:

- **Knowledge curation**: A relevant and updated knowledge base can add substantial value for CSPs. BMC HelixGPT Knowledge Curatoruses AI to enhance knowledge management by improving readability, reducing redundancy, and ensuring relevancy.It helps identify and address issues like duplicated content, obsolete information, and inconsistencies, ultimately leading to a more reliable and usable knowledge base.

- **Custom dashboards**: Building and accessing business-relevant dashboards is integral to the work of IT and network operations. BMC HelixGPT Insight Finderprovides a natural language chat interface that helps service owners and site reliability engineers (SREs) dynamically generate dashboards and reports with information about issues impacting service health or service-management-specific topics like tracking service level agreement (SLA) breaches and their related penalties.

- **Change risk evaluation**: Configuration changes can disrupt service and negatively impact the customer experience. BMC Helix GPT Change Risk Advisor assesses the risk of changes before they are implemented by analyzing operational and service management data, historical change data, and current operational data to provide a change risk score.

- **Collaboration tool integration**: Multi-channel collaboration is a must-have for service and operations teams. BMC HelixGPT Ops Swarmer allows them to work together in Microsoft Teams sessions launched directly from an incident record in the BMC Helix ITSM solution. The BMC HelixGPT platform evaluates previous responses to similar issues and quickly recommends the most appropriate team members and Teams chat participants to ensure the best response.

The newest entry in the BMC HelixGPT portfolio, BMC HelixGPT Agent Builder, goes one step further by empowering CSPs to create their own custom AI agents to automate their unique workflows. These custom agents can be integrated with various systems and processes, enhancing automation capabilities and flexibility.Click here to learn more about BMC HelixGPT AI agents and what they can do for you.