

Market Insight Report Reprint

Netcracker moves agentic AI from telco lab to live carrier deployments

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Introduction

Netcracker Technology has extended its agentic AI platform from early pilots to commercial deployments across multiple carriers. The company offers more than 100 ready-to-deploy AI agents spanning customer experience, service operations, network operations, business operations, and sales and marketing functions. Its platform works with any large language model and any third-party BSS or OSS stack, positioning Netcracker as an open-layer vendor rather than a closed AI system. With carriers demanding measurable return on investment from agentic AI investments, Netcracker's production deployments at T-Mobile US Inc. and C Spire offer early evidence of telco-specific agentic AI opportunities.

THE TAKE

Netcracker's shift from agentic AI pilots to production deployments with quantified business outcomes puts it ahead of most business/operations support system (BSS/OSS) competitors, which are still announcing capabilities rather than demonstrating verified returns. Its open, LLM-agnostic architecture is a credible differentiator today, along with its strategic partnerships with hyperscalers and Anthropic, but that advantage narrows as Amdocs Ltd. deepens its Microsoft Corp. and OpenAI co-investment and hyperscaler-aligned offerings become the default for carriers already committed to those ecosystems. The more durable differentiator is the telecom ontology and domain-specific agent library — assets that take years to build and are not easily replicated by generic enterprise AI platforms. OSS automation remains the unresolved frontier; how quickly Netcracker can extend production-grade agentic AI beyond BSS and customer experience (CX) into network operations will determine its ceiling in the long term.

Context

Netcracker Technology is a telecom IT software vendor offering BSS and OSS software, spanning CX, service orchestration, network management, product catalog and billing. The company sells both full-stack transformations and modular deployments. Netcracker is a wholly owned subsidiary of NEC Corp., but operates as a stand-alone vendor in the telco software market.

Netcracker launched what it then called a generative AI telco solution approximately two and a half years ago, before the term "agentic AI" entered broad use. The core architecture has remained consistent — combining large language models with telco-specific data retrieval to make AI agents useful in production — while the branding evolved to reflect industry nomenclature. The company is now reporting commercial deployments, not lab proofs of concept, across multiple carriers.

Netcracker has had multiple AI agents in production at T-Mobile's wholesale division for more than a year, and is deploying a business-to-business customer-facing agent for C Spire through a live sales and care portal. These deployments supply the verified customer and ROI data that earlier agentic AI coverage in telecom has largely lacked.

The broader market context reinforces the timing. A 451 Research Voice of the Enterprise: AI & Machine Learning, Use Cases 2025 survey found that 58% of businesses show "strong interest" in using AI agents, with the telecommunications industry registering 47% "very strong interest" specifically. The industry also contends with a lack of standards to define agent governance, making verified production deployments, rather than proof-of-concept pilots, the key differentiator in this market.

Netcracker also recently closed the acquisition of CSG Systems International, a billing and revenue management vendor with significant North American market share and roughly 30% of its revenue outside telecom, including fintech and healthcare. The deal is expected to close in the near term and would expand Netcracker's US presence substantially.

Product

Netcracker's agentic AI solution is organized into three layers: a library of ready-to-deploy AI agents, an agentic AI platform and an AI-native BSS/OSS integration layer. Each layer is designed to work independently of the others, allowing carriers to adopt components without requiring a full-stack Netcracker deployment.

The agentic AI platform has three main components. The Agent Design Studio is a combined build-and-run environment where Netcracker or carrier teams create, test and simulate agents before deploying them. The Intelligent Telecom Knowledge Layer sits beneath the agents and supplies them with structured, telco-specific context — including a telecom ontology that maps relationships between customers, services, network resources, and physical and virtual devices. This ontology is updated continuously and distinguishes Netcracker's approach from generic enterprise AI platforms that lack telco domain knowledge. The third component — Agent Orchestration and the AI Trust & Control layer — governs how agents operate at scale: managing conflicts between agents, enforcing policy guardrails, enabling human override and providing full audit trails so operators can trace every agent decision.

Agents connect to underlying systems through Model Context Protocol (MCP) servers, which Netcracker is building for each of its BSS and OSS products. MCP sits above traditional APIs and presents data to agents in a format that reduces integration complexity. Where MCP is unavailable — such as with third-party vendor systems — the platform falls back to standard API connections.

The platform is LLM-agnostic. It does not include its own large language model; instead, it routes agent requests to whichever model — commercial or on-premises — the carrier selects. Supported options include OpenAI's GPT models, Google Gemini, Anthropic Claude and open-source models derived from Meta Platforms Inc.'s Llama. The platform's design studio can benchmark multiple models against a given use case and automatically select the most cost-effective option.

Netcracker offers more than 100 ready-to-deploy agents across five categories: customer agents, service operations agents, network operations agents, business operations agents, and sales and marketing agents. Agents are structured in a hierarchy. Domain agents are specialists — a bill explanation agent, an invoice agent, a fault resolution agent — with each trained on a narrow set of data and tasks. Role-based agents, such as a consumer agent or a B2B customer agent, sit above domain agents and draw on multiple specialists to handle broader customer interactions. Goal-based agents represent the most autonomous tier — a churn reduction agent or a network autopilot agent — and are designed to analyze a problem, develop an action plan and execute it, although Netcracker notes that telcos are not yet deploying this tier in fully autonomous mode.

Competition

Netcracker competes primarily with established BSS/OSS vendors — Amdocs, Huawei, Oracle Corp. and Telefonaktiebolaget LM Ericsson — all of which offer overlapping customer engagement and operational support capabilities and are developing their own AI agents for the telecom sector.

Amdocs is the most direct comparable. In February 2026, it launched aOS (agentic operating system for telecom), designed to run on top of any BSS/OSS stack and embed AI agents directly into telecom operations. Amdocs has a partnership with Microsoft and OpenAI, integrating its platform with Microsoft Dynamics 365 — a tighter hyperscaler alignment than Netcracker's explicitly LLM-agnostic architecture. The key differentiator between the two is not basic AI capability but depth of telco-specific use cases, cross-domain agent orchestration, and business-driven configurability.

Ericsson has revamped its BSS/OSS portfolio to include agentic AI features for automated service design and intent-driven network operations, and has established a Telco Agentic AI Studio with AWS to accelerate development. Ericsson's approach leans on its network infrastructure position, giving it strong OSS credibility but a different go-to-market angle than Netcracker's IT-layer focus. Huawei's Agentic BSS, unveiled in March 2026, uses a unified LLM Engine agent platform with specialized agents for intent-driven offering design and empathetic marketing, and proposes a telco-specific Agent2Agent interface for multi-agent collaboration. Nokia Oyj's Autonomous Networks Fabric (built with Google Cloud) similarly targets network and service operations rather than BSS.

Oracle Communications offers cloud-native BSS/OSS with built-in AI/ML, and IBM Corp. addresses the telco BSS market through its watsonx AI platform.

Salesforce Inc. has historically pursued the telco vertical and is developing industry-specific AI agents, but does not offer BSS capabilities. Its agents operate at the CRM layer rather than across the full BSS/OSS stack. Netcracker argues that generic enterprise AI platforms — including Salesforce and ServiceNow Inc. — lack the telecom ontology and cross-domain data access required for complex carrier workflows. That assessment is broadly consistent with 451 Research analysis, which identifies telco-specific domain knowledge and BSS/OSS integration depth as the primary capability gaps for horizontal offerings.

SWOT Analysis

STRENGTHS Netcracker has production deployments with quantified ROI across multiple carriers, giving it verified proof points that most competitors have not yet matched. Its open, LLM-agnostic architecture avoids lock-in to any single hyperscaler or model vendor, which is a defensible position as model pricing and availability continue to shift. Its library of 100-plus telco-specific agents, combined with a continuously updated telecom ontology, gives it domain depth that generic enterprise AI platforms cannot easily replicate.	WEAKNESSES Netcracker’s agent platform is most effective within or adjacent to its own BSS/OSS stack; carriers running competitors’ systems may face higher integration friction, limiting its addressable market to accounts where it already has a software footprint. The company does not disclose revenue or head count, making its scale and financial trajectory difficult to assess relative to larger, publicly reported peers. OSS-facing agent use cases remain behind BSS — Netcracker acknowledges that network-side agents require more tooling and data infrastructure before they can reach the same production maturity as CX-focused deployments.
OPPORTUNITIES Carrier demand is shifting from experimentation to production deployment, and Netcracker’s existing production track record positions it to capture deals as operators move past proof-of-concept budgets. The CSG acquisition opens new markets and adjacent verticals — fintech and healthcare — where Netcracker has minimal direct presence. Growing carrier interest in sovereign AI and on-premises LLM deployment — driven by data residency regulations in the EU and Asia-Pacific markets — favors Netcracker’s model-agnostic architecture over competitors with tighter ties to hyperscalers.	THREATS Amdocs’ alignment with Microsoft and OpenAI may be preferred by carriers already committed to the Microsoft ecosystem, narrowing Netcracker’s differentiation on openness. Huawei, Ericsson, and Nokia are all accelerating agentic AI investments with network infrastructure advantages that give them strong OSS credibility Netcracker does not hold. The lack of industry standards for agent governance creates deployment friction across the sector, slowing the scaled adoption that Netcracker’s road map depends on.

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