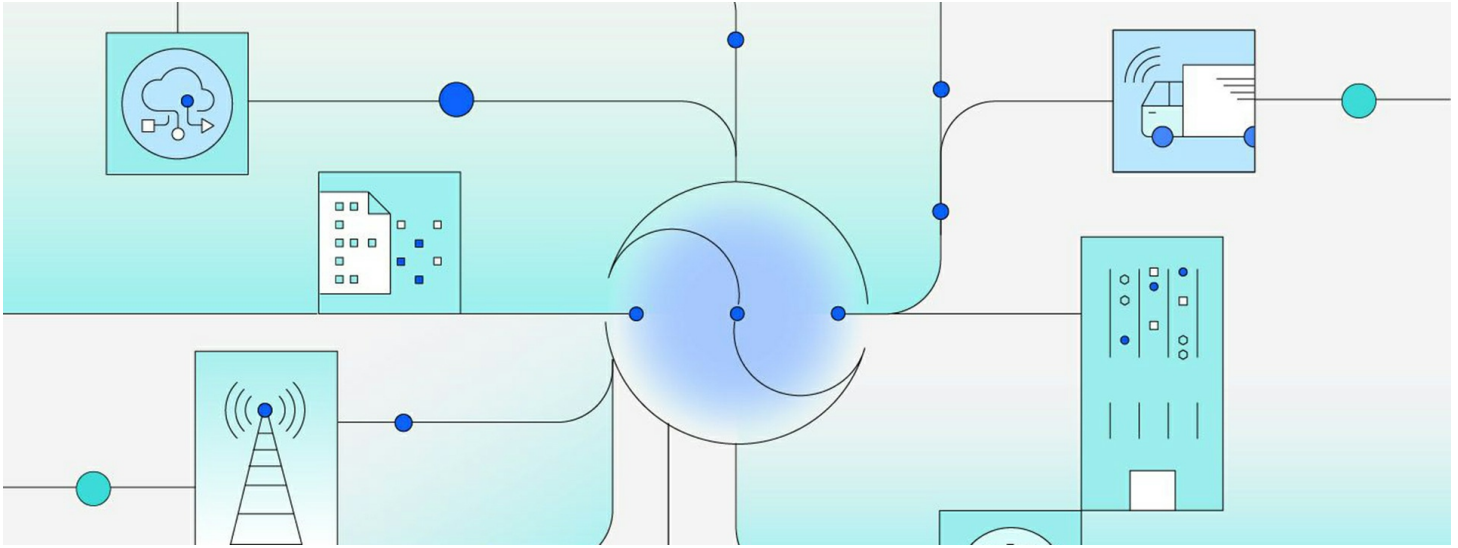


New IBM Study: Pioneering Telcos Ramp Up AI, Cloud and Security Investments for the Next Wave of Network Modernization



ARMONK, N.Y., Feb. 24, 2025 /PRNewswire/ -- A new global study from the IBM (NYSE:[IBM](#)) Institute for Business Value, with support from [GSMA Intelligence](#) found that telecommunication and communication service providers (CSPs) who are embracing cloud computing and Artificial Intelligence (AI) in their networks experience significant benefits, including enhanced performance, scalability, cost savings and monetization opportunities.

The global study*, "[Rewiring the Telecom Mindset: How CSPs are Gaining Network Advantage with Cloud and AI](#)" reveals insights from 750 global network executives —from leading providers including Bharti Airtel, Deutsche Telekom, Telstra, Verizon, and Vodafone—on the importance of adopting cloud and AI-driven approach to stay ahead in the rapidly evolving telecommunications landscape and deliver enhanced network performance.

Key findings include:

- 79% of telco executives surveyed prioritize network performance above all else, with network modernization as their second priority.
- 62% of those identified as pioneering technology innovators leverage traditional AI for network planning, compared to the 40% adoption rate of their peers, and 54% integrate generative AI into network planning, double that of their peers highlighting how cloud readiness can drive agility and unlock on-demand resources for advanced AI-driven capabilities.
- 55% of respondents say they've suffered a network security breach in the last 12 months. Despite this, only 42% of executives consider network security a top challenge over the next three years.
- Over the next three years, surveyed executives expect to increase network investments in cloud implementation by almost 20%, traditional AI by 16%, and generative AI by almost 19%.

The study also emphasizes the need for CSPs to look beyond technology adoption and transform their culture to capture network monetization prospects and stay competitive. This includes embracing bold, calculated risks, fostering collaboration,

learning from failure, and instilling a proactive approach to innovation.

"Telecommunications companies that adopt a cloud and AI-driven approach will be better equipped to navigate the complexities of the modern network landscape and capitalize on emerging opportunities," said Rahul Kumar, Senior Partner & Vice President, Global Industry Leader for Telco & Media Industry, IBM. "By rewiring their mindset and embracing a culture of innovation, CSPs can unlock significant benefits and stay ahead of the curve."

"The study's findings underscore the critical role that cloud and AI will play in shaping the future of telecommunications," said Peter Jarich, Head of GSMA Intelligence. "As the industry continues to evolve, it's clear that CSPs must prioritize network modernization, enhancing security, and innovation to remain competitive and drive growth."

Connect with IBM at MWC 2025: AI is taking center stage for IBM at MWC 2025. Join us as we delve into how the technology is enhancing everything from customer engagement and personalization to operational efficiency. IBM industry experts will be at Hall 2 - Stand 2H20 with dynamic activations and an insightful speaking program with daily sessions to delve into AI use cases and other relevant topics for attendees.

For more information and to access the full report, visit ibm.com/telecom-networks-cloud-ai

***Methodology**

The IBM Institute for Business Value, in cooperation with Oxford Economics, surveyed 750 telecommunications industry executives from 25 countries. Roles included CTOs, Chief Networks Officers; Heads of network planning and architecture, network operations, radio access network, core network, network security, network engineering, service assurance, and network IT systems; and leaders responsible for network monetization. A two-step cluster analysis was performed based on respondents' evaluations of cloud computing's impact on network characteristics and their implementation of AI technologies. The clustering variables included eight network performance indicators (rated on a scale from -100% to +10,000%): network performance, security, scalability, flexibility, reliability, availability, maintenance costs, and deployment time. Additionally, the analysis incorporated the number of use cases where organizations deployed both traditional AI (including machine learning) and generative AI across 17 network management areas, ranging from network planning to field service operations. This clustering approach identified a distinct leading segment characterized by superior benefits derived from cloud computing adoption, coupled with broader implementation of both AI and generative AI solutions across network operations. In addition, 14 executives from leading companies in the telecom industry were selected to be interviewed one-on-one to validate and explore the survey results in more depth.

The IBM Institute for Business Value, IBM's thought leadership think tank, combines global research and performance data with expertise from industry thinkers and leading academics to deliver insights that make business leaders smarter. For more world-class thought leadership, visit: www.ibm.com/ibv.

About GSMA Intelligence

GSMA Intelligence is the definitive source of global mobile operator data, analysis and forecasts, and publisher of authoritative industry reports and research. It is the most accurate and complete set of industry metrics available, comprising tens of millions of individual data points, updated daily. GSMA Intelligence is relied on by leading operators, vendors, regulators, financial institutions and third-party industry players, to support strategic decision-making and long-term investment planning. Visit www.gsmainelligence.com for more information.

About IBM



IBM is a leading provider of global hybrid cloud and AI, and consulting expertise. We help clients in more than 175 countries capitalize on insights from their data, streamline business processes, reduce costs and gain the competitive edge in their industries. More than 4,000 government and corporate entities in critical infrastructure areas such as financial services, telecommunications and healthcare rely on IBM's hybrid cloud platform and Red Hat OpenShift to affect their digital transformations quickly, efficiently and securely. IBM's breakthrough innovations in AI, quantum computing, industry-specific cloud solutions and consulting deliver open and flexible options to our clients. All of this is backed by IBM's long-standing commitment to trust, transparency, responsibility, inclusivity and service. Visit www.ibm.com for more information.

Media Contacts:

Fran Pelayo
Global External Relations Lead, Public Sector and Telco, IBM
fran.pelayo@ibm.com

GSMA Press Office
pressoffice@gsma.com

SOURCE IBM

Additional assets available online:  [Photos](#) 

<https://newsroom.ibm.com/2025-02-24-new-ibm-study-pioneering-telcos-ramp-up-AI,-Cloud-and-Security-investments-for-the-next-wave-of-network-modernization>