

Twimbit AI Radar

Roundup of innovative enterprise
deployments and announcements

#7

Telecom Edition



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Twimbit is a research and advisory firm driven by a singular mission: to empower businesses that are making a difference. We specialise in providing invaluable industry intelligence to executives and teams, acting as a catalyst for innovation and growth.

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Summary

Twimbit AI Radar is a monthly series that recaps innovative AI deployments and announcements in telecommunications, financial services, and customer experience fields of practice. It also offers insights into companies deploying AI, aimed at assisting business executives and technology leaders develop their own AI projects and long-term strategies.

Company(s)	Deployment/Initiative
	<p>Reliance Jio expands the JioBrain AI platform to enhance network management and service delivery with Gen AI.</p> <ul style="list-style-type: none"> Integrates with its 5G network for high service quality by quickly detecting disruptions. Plans to develop green-powered data centres to make AI applications more affordable across various sectors.
	<p>BT Group collaborates with Amazon Web Services (AWS) to deploy the GenAI Gateway.</p> <ul style="list-style-type: none"> Enhance Gen AI management and streamline access to AI tools. Reduce errors and improve operational efficiency within BT's Openreach division.
	<p>AT&T collaborates with AI technologies to optimise supply chain operations, enhance efficiency and reduce costs.</p> <ul style="list-style-type: none"> Predictive maintenance for its fleet minimises breakdowns. AI from H2O.ai improves technician assignments, boosting service delivery and operational efficiency.
	<p>SK Telecom deploys the AI Orchestrator to enhance network management and automate 4G and 5G infrastructure operations.</p> <ul style="list-style-type: none"> Streamline processes, reduce task completion times, and predict network issues. Improve overall operational efficiency and service quality.
	<p>Korea Telecom deploys an AI-powered voice phishing detection system for fraud prevention.</p> <ul style="list-style-type: none"> Features a Voice Phishing Detection AI Agent and a Number Notification Service.

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| | <ul style="list-style-type: none">• Detect phishing in real time, flag suspicious numbers, and enhance customer security. |
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Introduction

Today, AI and its capability to improve predictive maintenance and customer behaviour pave the way for tailored services and reduced network disruptions. [According to Veritis](#), AI automation aims to cut operational costs for telecommunications companies by 30%. Similarly, AI-driven chatbots contribute to a 25% increase in customer satisfaction with instant and personalised support.

AI advancement has encouraged companies to embrace intelligent network automation and personalised, data-driven strategies. As a result, telcos have quickly transformed their traditional service models, positioning themselves as frontrunners in the competitive digital landscape.

This month, we explore the latest AI innovations, offering a roadmap for telecoms that aim to leverage technology and shape the future of connectivity.

Reliance Jio Expands JioBrain for Enhanced Network Management

Launched in January 2024, JioBrain is a GenAI platform using Jio's high 5G speeds for anomaly detection, predictive forecasting, and automation. This empowers CSPs (communication service providers) to apply machine learning at the network edge and in the cloud for applications across healthcare, education, gaming, and entertainment.

By monitoring millions of data points at instant speeds, JioBrain can identify anomalies such as service disruptions and maintain high service quality for Jio's 450 million users.

Future plans for expanded AI offerings include developing green power in data centres and AI inference facilities with global partners. With affordability at heart, Jio aims to enhance its capabilities in agriculture, healthcare, education, and small businesses. This deployment reinforces Reliance Jio's leadership in telecom and cloud services in a rapidly evolving digital landscape.

BT Group Deploys GenAI Gateway with AWS for Enhanced AI Management

High efficiency is the tagline for the Gen AI Gateway, enabling staff secure access to advanced NLP (natural language processing) systems and large language models (LLMs).

This centralized gateway streamlines API management, security and infrastructure to reduce resource duplication and error risks. BT teams are also encouraged to use different AI models flexibly and responsibly with features like central privacy controls, usage-based billing and access to various corporate data sources.

Currently live and in trial within BT's Openreach division, the GenAI Gateway summarises engineering notes related to broadband projects. Other departments such as business, legal, and procurement, are also testing its capabilities.

This deployment strengthens BT Group's commitment to AI-driven operational efficiency and support across its functions.

AT&T Enhances Supply Chain Operations with AI Innovations

Powering up its supply chain operations, the standout innovation to date has been AT&T's use of predictive maintenance. Managing a fleet of ~7000 trucks that service its network infrastructure, AT&T has developed models to predict potential failures in vehicle components such as batteries.

For instance, the company identified how technicians' driving habits influenced battery lifespan. By synchronising battery replacements with brake replacements, AT&T has minimised truck breakdowns, resulting in USD 7 million annual savings.

AT&T has also maximised its AI knowledge to resolve more human challenges, specifically effective job assignments. By employing H2O.ai to create optimisation models, AT&T has effectively matched over 100,000 technicians with suitable jobs. The result is two-fold – enhanced service delivery and reduced fuel consumption, yielding savings of more than USD 10 million each year.

Overall, AT&T's integration of AI technologies significantly boosts operational efficiency and strengthens its capacity to provide superior service in a competitive landscape.

SK Telecom Deploys AI Orchestrator to Revolutionize Network Management

Streamlining tasks that previously took days to complete, AI Orchestrator reduces them to mere hours by automating software-defined networking (SDN) processes. It allows network engineers to input scripts in familiar programming languages, which the system instantly translates into device-specific commands, providing SK Telecom with a strategic advantage in terms of both speed and accuracy in managing its network infrastructure.

This AI-driven platform also bolsters risk management by detecting harmful commands, tracking software updates, and automatically adjusting code to prevent errors. AI Orchestrator's ability to predict network issues and traffic patterns allows SK Telecom to respond proactively to potential disruptions, ensuring smoother and more reliable network performance.

By integrating AI Orchestrator, SK Telecom not only enhances the operational efficiency of its network but also strengthens its ability to maintain top-tier service quality, setting itself apart in the highly competitive telecom landscape.

KT Unveils Advanced AI-Powered Voice Phishing Detection and Prevention Technologies

Safeguarding customers, KT's advanced AI-powered voice phishing detection system features two key technologies: the 'Voice Phishing Detection AI Agent' and the 'AI Voice Phishing Suspected Number Notification Service.' This innovation is designed to identify and prevent financial fraud in real time, enhancing customer protection.

The Voice Phishing Detection AI Agent leverages a small language model (SLMs) to convert voice conversations into text and rapidly detect fraud-related content. When a suspicious activity is identified, the system immediately alerts the customer. Unlike traditional keyword-based detection, this solution offers a more comprehensive approach by analyzing various risk factors such as personal information requests and financial transactions, improving accuracy while safeguarding user privacy through on-device data processing.

KT's AI Voice Phishing Suspected Number Notification Service also uses an AI classification model to pre-emptively flag phone numbers linked to phishing activities, notifying customers in real time. If a suspicious call is detected, the customer is warned via a video message before answering, with follow-up notifications sent for incoming and outgoing calls.

Transforming Telecom with AI: Essential Strategies for Innovation

Industry leaders like Reliance Jio, BT Group, and SK Telecom demonstrate how strategic AI adoption can dramatically enhance operational efficiency and service delivery. Learning from the best, telecommunications companies should focus on these essential strategies to maximise AI for long-term competitiveness:

1. **Unified Platform Development:** Comprehensive platforms like JioBrain that process massive datasets across multiple functions inspire organizations to think differently in creating wide impact and consistent decision-making capabilities.
2. **Infrastructure Modernization:** SK Telecom's AI Orchestrator ability to automate complex operations and enable predictive maintenance indicates a bright pathway for companies to invest in AI-driven network management systems.
3. **Strategic Ecosystem Partnerships:** Collaborate with established cloud providers and AI specialists, as demonstrated by BT Group's partnership with AWS, to accelerate AI adoption and access cutting-edge capabilities without overwhelming internal resources.

By implementing these strategies, telecom providers can leverage AI to drive operational excellence, enhance customer experiences, and unlock new revenue streams. This approach will optimise current operations but position telecoms as innovative leaders in the digital age. Forward-thinking providers that successfully integrate AI across their operations will set new industry benchmarks and pioneer the future of telecommunications service delivery.