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Twimbit AI Radar

Roundup of innovative enterprise
deployments and announcements

#3 **Telecom Edition**
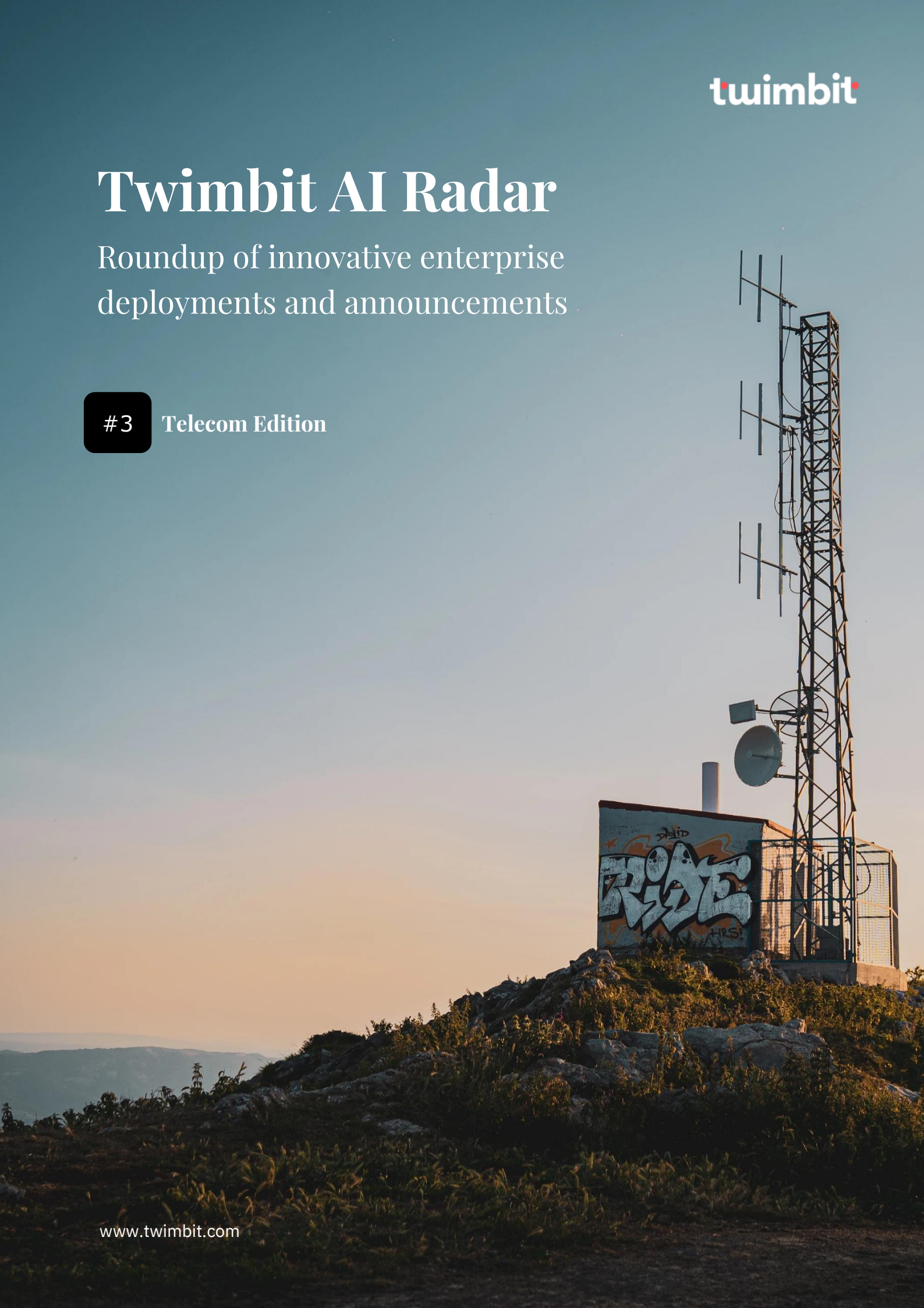
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Summary

This report is part of the monthly AI Radar series, offering a summary of innovative AI implementations and relevant company announcements within the telecommunications, financial services, and customer experience sectors. It provides insights into organizations utilizing AI, designed to aid business executives and technology leaders in developing their own AI initiatives and long-term strategies.

Company(s)	Deployment/Initiative
SK telecom	SK Telecom introduced X Caliber, an AI-based service for diagnosing veterinary X-ray images in Australia. It analyzes images of dogs and cats with samples stored in the cloud, allowing veterinarians to review and get medical results on any device in 15 seconds.
swisscom NVIDIA	Swisscom's Swiss AI Platform provides a comprehensive development infrastructure for enterprise AI applications. It offers access to NVIDIA supercomputers, Gen AI services, an AI work hub, and model libraries, serving as a one-stop shop for AI solutions for the entire lifecycle — from consultation to implementation.
Jio	Reliance Jio, via its subsidiary Jio Platforms, developed JioBrain, the world's first machine learning solutions marketplace, providing Gen AI features on an "as-a-service" model. This enables other companies to seamlessly incorporate ML capabilities into their network infrastructure operations, call analysis and fraud detection.
orange™ Augtera	Augtera Networks and Orange have partnered to integrate the Augtera Network AI platform into Orange's Network Operations Center (NOC) tools. This integration of Augtera's Anomaly Detection technology helps proactively identifies potential incidents before they manifest, significantly decreasing NOC alarms by 70% and mitigated network failures.
KDDI aws	KDDI has teamed up with AWS to facilitate the adoption of Gen AI among businesses and municipalities facing workforce shortages and operational inefficiencies. The partnership aims to provide strategic support in deploying innovative AI technologies from start-up and open-source communities.

Introduction

In today's world, customers expect more than mere connectivity and fast broadband speeds from their telcos. To stay competitive, telcos are focused on providing world-class customer experiences, akin to that of technology leaders like Apple, which see increased sales conversion rates of 10 to 15% drive by better CX. Leading digital natives, like Netflix use AI to analyze what users watch and how they interact to deliver real-time, personalized content recommendations, which result in better engagement and satisfaction.

To achieve this level of differentiation in telecom, organisations are going beyond traditional services to provide digital lifestyle solutions by incorporating financial services, e-commerce or even gaming to meet changing consumer preferences and trends. In this endeavour, some are beginning to aggressively incorporate AI into existing operations, ushering in an era of hyper-personalization, increased operational efficiency and even greater workforce productivity.

Leading telcos are pushing to increase ARPUs through digital channels and are deploying AI analytics for personalized marketing campaigns that leverage deeper customer insights to offer the right products at the right time. Furthermore, AI helps to enhance network management by detecting and flagging network outages or downtime before they occur, improving service quality and reducing customer complaints, enhancing the overall customer experience and cutting costs to serve. Lastly, telcos can also expect to see 45% of productivity gains with AI by 2035.

With AI becoming a hot topic of concession in many boardrooms, telcos are beginning to move fast. AI is now embedded in different experiments and deployments across the region. To keep pace with technological advancements, telcos are leveraging partnerships with technology vendors or cloud providers that often today offer AI platforms to build new applications or digital businesses that help telcos diversify growth opportunities.

Here is this month's AI recap in the telecom sector:

SK Telecom launches AI-powered diagnostic assistance service (X Caliber)

SK Telecom has officially launched its AI-powered veterinary X-ray analysis tool called X Caliber in Australia, Japan, Singapore and Indonesia. X Caliber' is a web-based service that uses AI to analyze X-ray images of dogs taken by a veterinarian and then uploaded to the AI platform 'X Caliber Vet AI'. Then, the tool delivers the analysis results back to the veterinarian within 30 seconds. X Caliber is hosted on the cloud and users can simply access the diagnostic results on their phones or computers anytime and anywhere.

X Caliber has impressive accuracy with a range from 86% to 94%. It can detect 16 different abnormal patterns in abdominal X-rays of dogs with 94% accuracy, 10 patterns

in chest X-rays with 88% accuracy, and 7 abnormalities in musculoskeletal X-rays with 86% accuracy.

As part of the expansion plan, SK Telecom has partnered with medical device institutions, equipment distributors and pet insurance firms (i.e., ATX Medical Solutions, Smitech, Anicom Holdings) to boost the distribution and use in hospital applications. While it is now only for pets, it is expected that X Caliber's capabilities can be expanded to provide diagnosis on human X-rays.

Swisscom collaborates with NVIDIA for AI supercomputing solutions

Swisscom has partnered with Nvidia to offer AI development infrastructure which includes open access to computational capabilities of NVIDIA supercomputers, Gen AI services via APIs from the Gen AI Studio, an AI work hub for developing industry AI applications and a library of models. With the partnership, Swisscom is offering GPU rentals for enterprise use cases and access to Switzerland's first supercomputer, SuperPOD, powered by Nvidia training and running large AI models.

Enterprise customers will now be able to get all their AI services from Swisscom, ranging from consulting and developing AI applications to implementing and securely operating them. On top of getting access to high-powered computational infrastructure, they will also be able to experiment or deploy sovereign AI use cases, involving sensitive data that must be stored and processed locally.

To further bolster the Swiss economy, Swisscom has formed the Swiss Centre of Excellence, supported by 400 AI and data specialists, to deliver comprehensive, customized, and technology-neutral solutions to local enterprise customers as a trusted partner.

Reliance Jio offers AI-as-a-Service suite with JioBrain

Reliance Jio, through its subsidiary Jio Platforms, has developed JioBrain as the world's first machine learning solutions marketplace, offering Gen AI features on an "as-a-service" basis. This allows other companies to smoothly integrate ML capabilities with existing network infrastructures while supporting standard data sources, formats, and protocols. Users can easily incorporate their datasets via an intuitive user interface, making it a flexible and accessible solution across various industries.

Range of services on Jio Brain:

- LLM-as-a-Service allows for leveraging large language models for tasks such as text generation and analysis.
- Speech and Text Translation services improve multilingual communication through speech-to-speech and text-to-speech capabilities.
- Text/Image-to-Video Generation transforms textual and visual content into videos, supporting marketing and educational endeavours.

- Code Generation and Debugging automate software development processes for efficiency.
- The Bring Your Model feature enables businesses to integrate their own AI models with JioBrain's infrastructure for tailored solutions.

Additionally, Reliance Jio's subsidiary Haptik has launched Contakt, a dedicated Gen AI platform for building advanced chatbots, to meet the growing demand for sophisticated virtual assistants and back-end information support.

Contakt harnesses OpenAI's GPT-3.5 and GPT-4 models to empower clients with advanced conversational capabilities across text, audio, and image inputs via chat interfaces. Currently piloted by Upstox, Starbucks, Tira, and the Indian School of Business, the platform demonstrates practical applications in diverse business contexts. Contakt not only utilizes default OpenAI language models but accommodates the integration of other niche LLMs to meet specific client needs. Looking ahead, Contakt aims to expand its functionalities to include handling audio queries through phone calls by 2024.

Orange introduces Augtera Network AI Platform

Orange International Networks has integrated the Augtera Network AI Platform through the Orange Private Cloud to collect network structure and site-related data. The Augtera Network AI platform creates machine learning models with real-time data, using both unsupervised and online machine learning. These models are designed to detect anomalies in network performance metrics and logs and automatically identify correlations using the discovered network topology.

Outcomes:
- 70% reduction in the daily number of alarms.
- Improved quality of service by proactively preventing network failures

In addition, the Augtera platform has significantly reduced the number of false alarms, subsequently, streamlining operations and freeing resources to handle critical problems more effectively. Additionally, it analyses weak signals through the preventive data plane, control plane, and congestion levels to further prevent network failures.

KDDI and AWS to introduce Gen AI applications for society

KDDI is partnering with AWS to support businesses and municipalities in adopting Gen AI, aiming to accelerate its integration into society. KDDI aims to support organizations facing workforce shortages and operational inefficiencies through the strategic use of Gen AI solutions from start-ups and open-source communities. They will offer customized AI solutions, and manage the entire AI lifecycle from design to deployment and maintenance using data platforms on AWS and agile development frameworks.

The KDDI-AWS collaboration model:
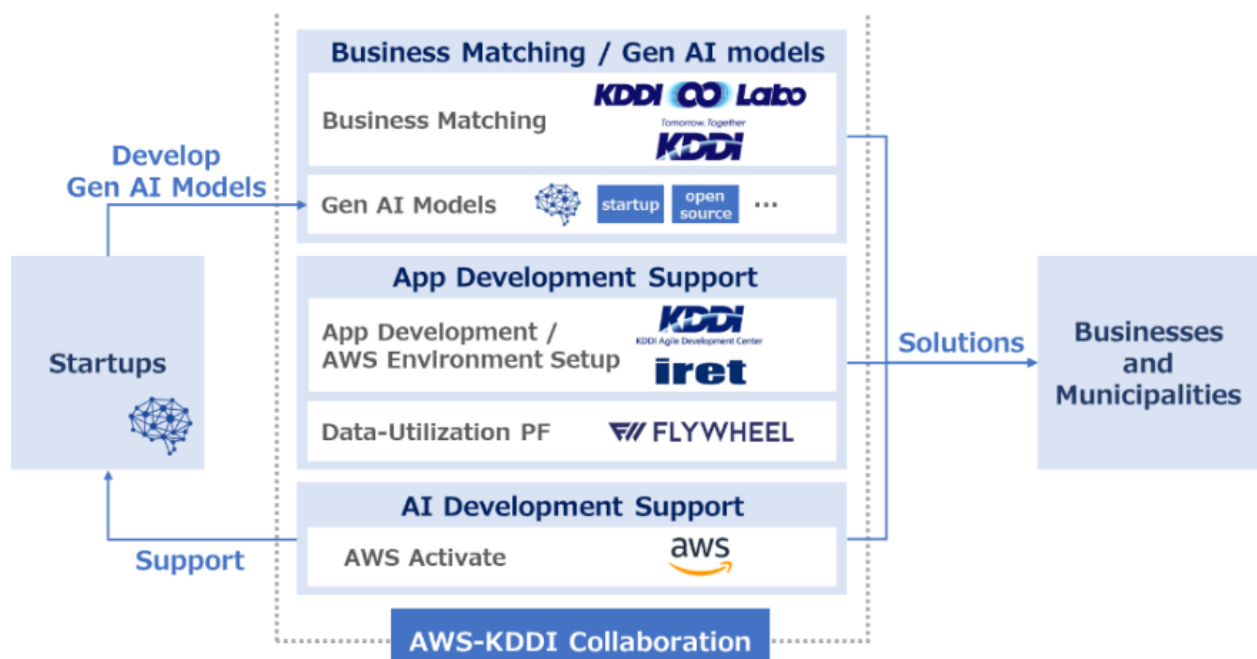
KDDI ∞ Labo (KDDI MUGENLABO) serves as a dynamic business co-creation platform that facilitates collaboration between startups and established enterprises. This platform uniquely combines innovative business ideas and cutting-edge technologies of startups with the extensive real-world assets and resources of large corporations like Microsoft, Google Cloud and Toshiba. By leveraging this synergy, KDDI ∞ Labo fosters the development of new and impactful businesses that address emerging societal challenges and market needs. This collaborative approach not only encourages innovation and entrepreneurship but also aims to drive positive social and economic impact through the creation of scalable and sustainable ventures. Through KDDI ∞ Labo, diverse stakeholders can collaborate and experiment with innovative solutions for various industries.

As part of the collaboration, KDDI will leverage FLYWHEEL's platform, Conata alongside its au big data and cloud infrastructure from KDDI Digital Divergence Group, to offer enterprise capabilities of simulating a company's business as a digital twin, projecting cross-functional business activities in a virtual environment and producing real-time results.

How AI is redefining telecom?

Artificial Intelligence (AI) is fundamentally reshaping the telecom sector, enhancing operational efficiency, and customer experience, and most importantly, enabling unprecedented innovation opportunities. By leveraging AI technologies, telecom companies can achieve proactive network management, preemptively resolving issues before they affect service quality. Additionally, AI empowers the development of domain-specific solutions ranging from healthcare to customer service with increased abilities of LLMs to be personalised and fine-tuned for custom applications, coupled with the emergence of smaller, niche models tailored for industries that require higher levels of governance, transparency and accuracy.

We are at a pivotal point where the integration of AI and machine learning across various functions will become increasingly commonplace. Implementing effective, safe, and reliable AI applications will define market leaders in an increasingly competitive landscape. Most telecommunications companies recognize that AI is a strategic tool for driving business outcomes both internally and externally; according to Nvidia, 65% of telecom executives prioritise this technology as a significant driver of company success.

With the explosion of Gen AI models, tools and applications, AI is no longer a luxury but a necessity to remain competitive. AI's ability to analyze vast amounts of data provides telecom companies with actionable insights to personalise increasingly digital offerings and improve the quality of work while uncovering new business models. With huge amounts of data, telcos are in a great position to prosper. However, seizing this opportunity will require telcos to shift away from legacy ways of operating and embrace new levels of innovation and agility, especially in the early days of the technology, to set the right foundation for adopting AI at scale.