

Who's Winning the AI Race?

Meet APAC's Top 10 Telcos

A benchmark report uncovering the telcos
leading AI transformation across Asia Pacific

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Present a comprehensive AI maturity assessment with detailed scoring, transparent methodology, and validated sources to enhance credibility (include references for cross-verification and context)

Background

Telcos across Asia Pacific face slowing revenue growth, even as capital expenditures continue to rise. In this shifting landscape, the region's leading telecom operators are no longer content with being just connectivity providers.

The **Top 10 APAC Telcos to Ace AI** report highlights how these companies are transforming into AI-powered technology enterprises, unlocking new sources of value and competitive edge. This study consolidates strategic initiatives, AI investments, ecosystem partnerships, and implementation progress to provide a comprehensive view of telcos' AI transformation and maturity.

Purpose of the report

01

Provide actionable insights into the AI strategies, roadmaps, and investments of APAC telcos.

02

Benchmark 34 telcos' AI maturity across 6 key components and 30 sub-components.

03

Identify success factors, gaps, and best practices shaping AI leadership in the telecom industry.

Target Audience



Executives seeking strategic insights into AI-led telecom transformation plans.



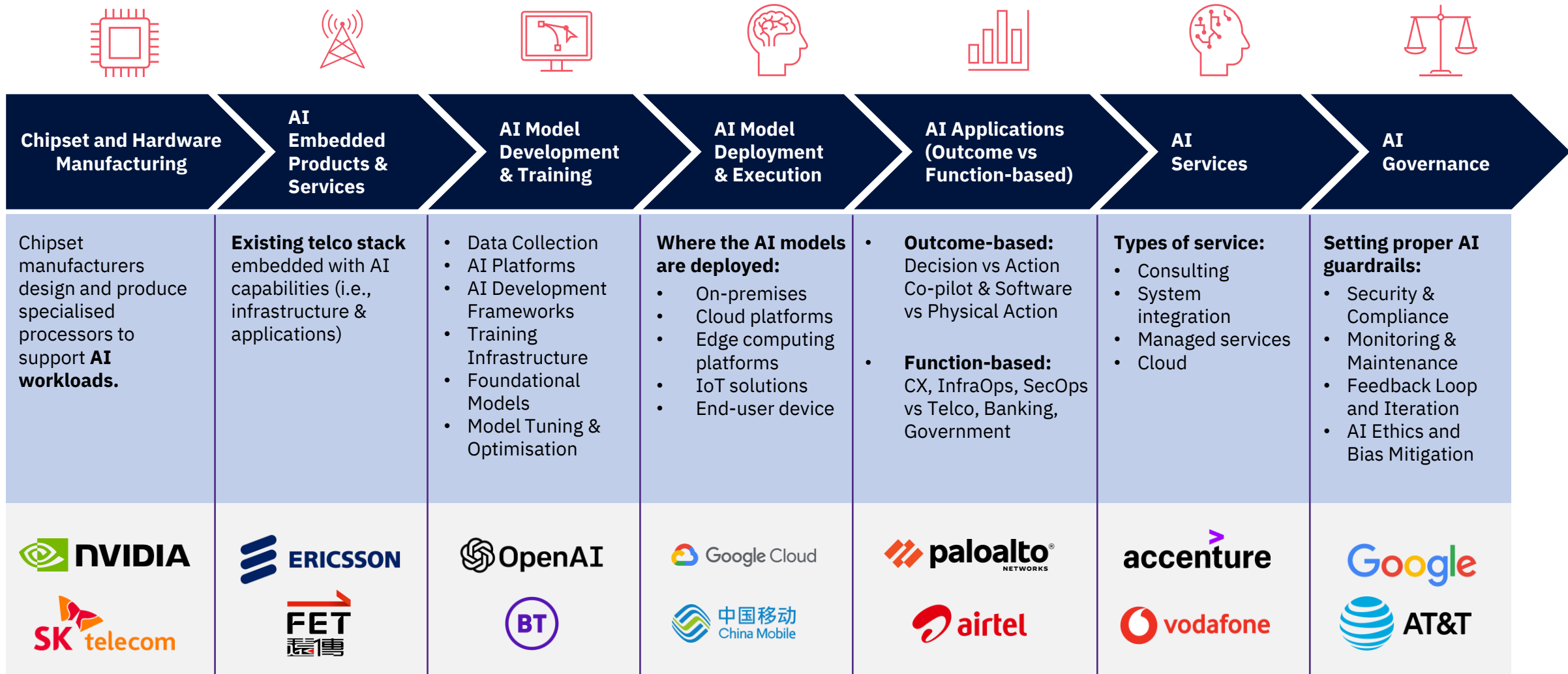
Technology leaders and innovators driving AI adoption within telecom and other operations.



Researchers analyzing AI maturity and deployment trends across telecom ecosystems.

The role of telcos are shifting in the AI era

AI Value Chain for Telcos



Measuring AI maturity with a 6-part framework

	Foundational Level 1	Emerging Level 2	Developing Level 3	Advanced Level 4	Transformational Level 5
Strategic Alignment	No AI strategy or roadmap	AI mentioned in isolated pilots; no clear alignment	AI goals and roadmap defined for some business units	AI integrated into business strategy across functions	AI drives enterprise-wide differentiation and growth
People & Processes	No dedicated AI team or individual AI champion exist	Small pilot teams or individual AI champion exist	Formal AI roles and pilot team structures established	Cross-functional AI teams embedded across operations	AI culture embedded; AI-led decision making-enterprise
Technology & Applications	No AI tools or platforms evident in operations	Piloting selected AI tools with limited system integration	Operational AI platforms deployed in key areas	Integrated AI solutions across multiple business units	Proprietary AI tech stack embedded in product & services
Data Management	Fragmented, inconsistent data with no governance	Initial data hygiene practices; partial data unification efforts	Centralized data platform with governance in place	Real-time, integrated data pipelines supporting AI	Enterprise-wide data governance; data as strategic assets
AI Governance, Risk & Ethics	No AI governance, risk or ethics measures present	Early awareness; informal guidelines or discussions	Defined governance policies; basic risk framework	Comprehensive governance covering ethics and compliance	Proactive AI governance with fairness audits and transparency
Innovation & Experimentation	Minimal AI experimentation; no formal process	Isolated pilot projects experimenting with AI	Formal AI experimentation pipelines established	Innovation labs and programs testing new AI solutions	Continuous AI innovation embedded in enterprise R&D

Note: Each telco was evaluated across 6 components and 30 sub-components using a 5-level maturity scale (1 = Foundational, 5 = Transformational) based on research-based evidence of AI strategy, investments, partnerships, use cases, governance, and technology.

Presenting the top 10 APAC telco leaders in AI

The telcos we studied in this Asia Pacific analysis indicates a strong potential for the region to meaningfully contribute to the global AI phenomena. Today, these connectivity providers are not just adopting AI for the productivity and efficiency gains—they are rearchitecting their core to become AI-native enterprises to gain from business model disruptions.

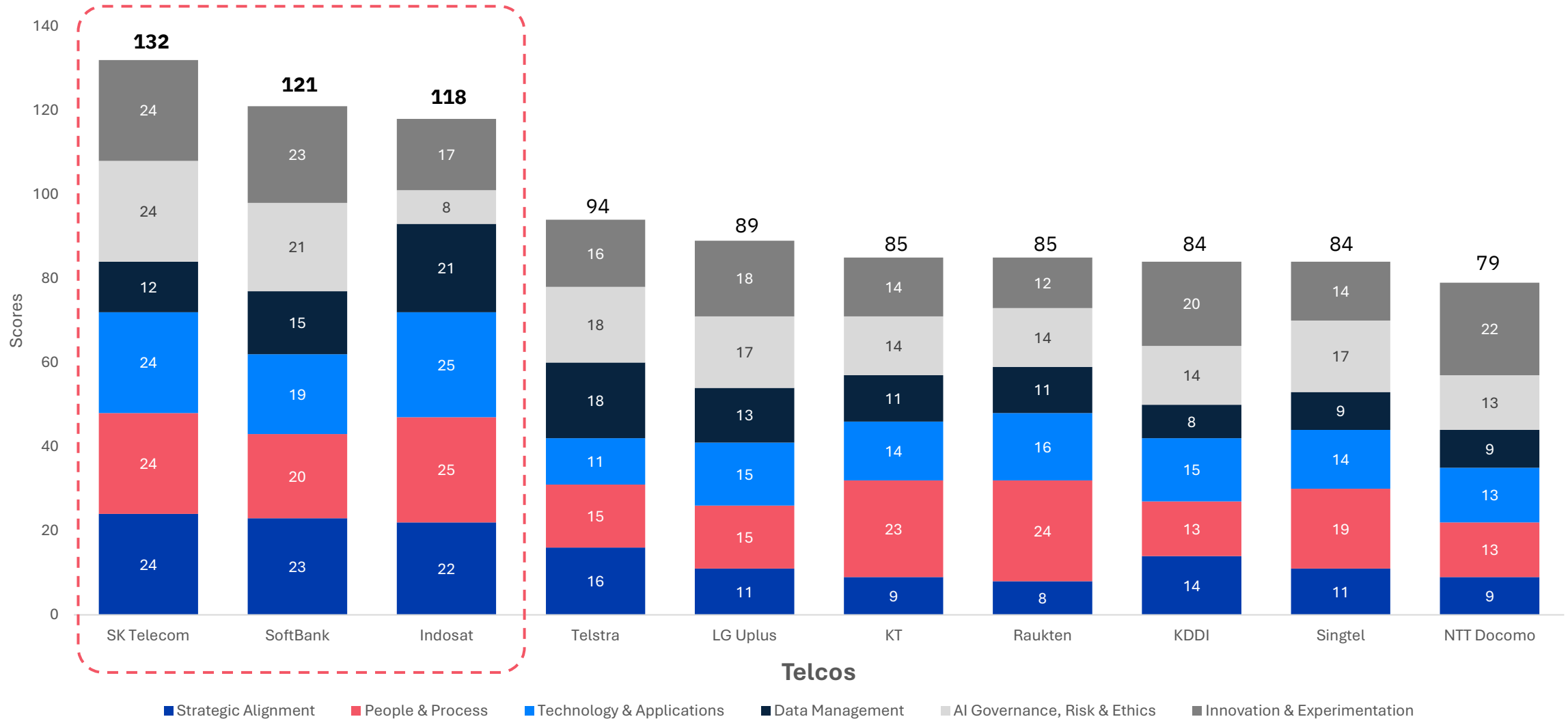
From SoftBank's AI chip investments to SK Telecom's sovereign AI infrastructure play and Indosat's mission to make AI a national agenda, these leaders are aggressively moving beyond experimenting with POCs and are starting to scale projects.

From our research, we see that leaders invest significantly to ensure that every facet of AI adoption is done right: from building alignment across strategy and operations, designing the right technology and data architecture, ensuring governance is baked into development and production, and developing new-age operational models to drive execution.

What sets them apart is not the technology alone, but the ability to integrate AI into business outcomes—driving efficiency, innovation, and new value creation across the telecom stack.

Telcos	Rank
	1
	2
	3
	4
	5
	6
	7
	8
	9
	10

SK Telecom, Softbank and Indosat are leaders in the region



Note: The total AI maturity score is out of 150, based on six components. Each component score is out of 25, derived from a standardized evaluation of 30 AI sub-capabilities.

Leaders set the gold standard across six pillars of AI maturity



Strategic Alignment

- Clear AI vision aligned to enterprise goals
- KPIs tracked at board/executive level
- Cross-functional alignment between business and tech units



People & Processes

- Federated AI CoEs embedded across functions
- Upskilling across all levels, not just technical teams
- Roles and responsibilities clearly defined for AI delivery



Technology & Applications

- Integrated MLOps and cloud-native AI platforms
- Enterprise-wide GenAI/LLM deployment
- AI embedded in core product and service stack



Data Management

- Unified data platform supporting model training and deployment
- Data treated as a strategic asset
- Strong data governance policies and access control



AI Governance, Risk & Ethics

- Explainability, fairness, and bias checks integrated
- Global compliance (e.g., ISO 42001, GDPR, PIPA)
- Ethics frameworks enforced by dedicated governance councils



Innovation & Experimentation

- Dedicated AI labs for testing new ideas
- Co-innovation with startups and ecosystem players
- Internal metrics to track PoC conversion and scalability

AI-driven Telco Highlights

Key AI deployments from the telco leaders in APAC



Let the network think for Itself

Rakuten Mobile

AI maturity score

85

Champion zero-touch network automation

Rakuten operates the world's first fully virtualized mobile network, eliminating the need for traditional legacy infrastructure.

Its **AI-powered, cloud-native architecture** enables a zero-touch, zero-defect approach to network operations — automating fault detection, traffic optimization, and performance scaling in real time.

SK Telecom

AI maturity score

132

Automate and predict network performance

SK Telecom uses its AI Orchestrator network platform to proactively monitor, predict, and self-heal network anomalies.

By integrating **AI into 5G infrastructure** management, SKT improves uptime, ensures faster response to faults, and delivers seamless connectivity with predictive capacity allocation.

Redefine customer support with AI agents

Indosat

AI maturity score

118

Build multilingual, intelligent support at scale

Indosat's **virtual agent platform**, powered by NLP and multilingual AI, handles millions of customer queries across Bahasa, English, and local dialects.

By combining automated intent detection with personalized routing, the platform reduces wait times and increases first-contact resolution — improving overall CX efficiency.

Singtel

AI maturity score

84

Elevate experience with AI-powered self-service

Singtel integrates **conversational AI and analytics** across its contact center to support tier-1 service queries and track customer sentiment.

With **automated resolution journeys** and real-time escalation triggers, the telco delivers faster, more personalized customer support.

Build intelligent infrastructure to scale AI

SoftBank

AI maturity score

121

Invest in sovereign AI to future-proof infrastructure

SoftBank is building a **Japan-first LLM** stack via partnerships with companies like SB Intuitions and OpenAI Japan.

With investments in **domestic compute capacity** and specialized AI chips, SoftBank is localizing AI infrastructure to ensure data sovereignty, scalability, and ecosystem control.

Telstra

AI maturity score

94

Establish enterprise-wide AI enablement layers

Telstra has built a **centralized AI infrastructure stack** supporting machine learning operations (MLOps), scalable cloud models, and enterprise LLM integrations.

The telco's **AI@scale** architecture enables rapid experimentation, automation, and deployment across network ops, customer experience, and product innovation.

Turn AI into products and revenue

KDDI

AI maturity score

84

Launch AI-powered super apps for daily life

KDDI is transforming user engagement through ‘**au PAY**’, an AI-powered super app integrating lifestyle services like taxi booking and restaurant reservations.

By embedding AI into **digital touchpoints and payment ecosystems**, KDDI personalizes experiences and drives cross-service stickiness.

NTT Docomo

AI maturity score

79

Use AI to create smart & Connected ecosystems

NTT Docomo has built **AI-enhanced digital twins** and contextual services for smart cities, using predictive analytics and location-aware intelligence.

It is also investing in **open API platforms** and LLM-based solutions to power new service models across mobility, energy, and retail.

Top 10 Telcos Driving the APAC AI Revolution

Summarized profiles of telco leaders in AI



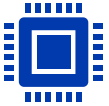


SK Telecom | AI Transformation

“*SK Telecom is working to integrate AI in all realms of business and establish the needed infrastructure.*”

Ryu Young-sang

Chief Executive Officer, SK Telecom

Key AI pillars	Objectives	Implementations
 AI Innovation & Services	Scale AI assistants (A., Aster) for global user engagement	Partnered with Perplexity & Anthropic; launched A (dot) and Aster with agentic features like AI phone and summaries
 Enterprise AI Integration	Embed AIX tools (A.Biz, Telco LLMs) to boost productivity across SK Group	Deployed AI contact centers, legal automation, and AI-driven customer support across 21 group affiliates
 AI Infrastructure Development	Establishing hyperscale AI data centers (AIDCs) in South Korea, with a testbed launching in Pangyo	Sapeon's X330 AI chip, delivering 2x computing power and 1.3x efficiency over current inference chips

Major investments

USD 200 Mn data center

Invested USD 200 Mn in SGH, a US based integrated AI data center solution provider

Invested in Anthropic

Invested USD 100 mn to develop LLM focused on creating advanced AI models

Investment in Perplexity

Invested USD 10 Mn to develop personalized AI assistants and personalized search experiences

Twelve Labs

Invested in AI-powered video analysis startup for enhancing its capabilities in analyzing video content

Sapeon X330

Developing next-gen AI chip 'X330' which has 1.3 times better power efficiency

Partnerships



Partnered with Perplexity AI to develop personalized AI assistants

Integrating generative AI into its services, to enable personalized AI assistants for users to improve AI-driven search capabilities, allowing for more intuitive, efficient, and context-aware search experiences across various platforms.



Collaborated with Lambda to establish large-scale NVIDIA GPU clusters

Building high-performance computing infrastructure using NVIDIA GPUs to accelerate AI model training and inference. This initiative enhances SK Telecom's AI cloud capabilities, providing scalable and efficient computing power for AI applications across industries.



Joined forces with SK hynix and Penguin Solutions to advance AI data center solutions

Driving innovation in AI data centers by integrating memory solutions and high-performance computing architectures.

AI Deployments

- **AI Network Quality Prediction**
Intel-powered AI detects network anomalies for proactive maintenance.
- **AI Contact Centers**
Proprietary LLM-powered customer support with RAG-enhanced knowledge retrieval.
- **Intelligent Document Processing**
AI automates document categorization & customer service workflow.

Governance & Compliance

- T.H.E. AI Principle (March 2024) By Telco, for Humanity, with Ethics AI → SKT's AI responsibility framework.
- ISO/IEC 42001 Certification (April 2024) First Korean telecom to achieve international AI governance certification.



SoftBank | AI Transformation

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Artificial Super Intelligence will evolve into Super Wisdom and contribute to the happiness of all humanity.

Masayoshi Son

Chief Executive Officer, Soft Bank

Key AI pillars

Objectives

Implementations



AI Innovation & Services

Invest in cutting-edge AI & deliver commercial AI platforms

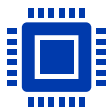
SoftBank Vision Fund focuses on AI startups revolutionizing telecom, finance, mobility, and automation.



Enterprise AI Integration

Embed Cristal Intelligence across SoftBank corporate ecosystem and Japanese enterprises

SB OpenAI Japan JV will deploy Cristal & ChatGPT Enterprise tools initially at SoftBank, Arm, PayPay — then to clients



AI Infrastructure Development

Build large-scale AI infrastructure to support SoftBank's AI ambitions.

Combining on-premises AI systems with cloud-based NVIDIA GPU clusters; co-leading \$500B Stargate project and Sakai Brain Data Center

Major investments

OpenAI Partnership

Formed a joint venture, SB OpenAI Japan which has USD 3bn annual budget for AI implementations in Arm, PayPay and enterprise clients

Strategic investment in avatarin Inc

Made strategic investment in July 2024 to accelerate development of its new customer service solutions.

Graphcore Acquisition

Acquired UK-based AI chipmaker Graphcore for USD 500 mn

AI-Driven 5G Optimization (AITRAS)

Enables AI-powered network automation and energy efficiency with NVIDIA Aerial RAN Computer-1 and Grace Hopper Superchips, cutting power consumption by 40% and increasing 5G uplink throughput by 20%

Partnerships

OpenAI **Established SB OpenAI Japan, a 50-50 joint venture with OpenAI**

SoftBank and OpenAI launched SB OpenAI Japan, a joint venture aimed at delivering AI-driven solutions to businesses across Japan with an annual budget of USD 3 bn.

avatarin **Strategic investment to develop new customer service solutions**

Partnership aims to focus on developing and advancing multimodal AI agents to enhance customer experiences in airports and public spaces, leveraging human expertise for more intuitive, responsive interactions.

GRAPHCORE **Acquired UK-based AI chipmaker Graphcore for approximately USD 500 mn**

Acquired major stake in the AI semiconductor company to enhance SoftBank's AI hardware and infrastructure portfolio.

AI Deployments

- **Hybrid AI Computing Model**
On-Premises AI Systems integrated with cloud-based NVIDIA GPUs
AI compute clusters featuring NVIDIA DGX SuperPOD with 25.7 exaflops total capability
- **AITRAS (AI-Driven RAN Architecture)**
AI-powered telecom automation using Red Hat OpenShift & NVIDIA AI Enterprise
Real-time AI inference for autonomous vehicles and robotics control

Governance & Compliance

- AI Governance Working Group under the Group Risk & Compliance Committee (GRCC)
- Strict AI risk management protocols with internal AI planning, development, and ethical checklists



Indosat | AI Transformation

“*This is the reason behind our 'Indosat AI NorthStar.' Our mission aligns with Indonesia's Golden Vision 2045, establishing the country as a lighthouse for digital innovation.*”

Vikram Sinha

Chief Executive Officer, Indosat

Key AI pillars

Objectives

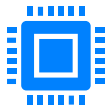
Implementations



AI-Native Telco

Embed AI into core telco operations to drive hyper-personalization, optimize CAPEX, and boost CX

AI-driven network automation, resource allocation, and intelligent marketing



AI-TechCo Development

Establish new AI business lines focused on sovereign AI, AI security, and national cloud infrastructure

Deployed “GPU Merdeka” sovereign AI cloud via Lintasarta + NVIDIA; built AI factory and enterprise AI services



AI Nation Shaper

Develop national AI capabilities through education, talent building, and sectoral AI transformation

Released Sahabat-AI LLM (multilingual 70B) with chat service; invested USD 200M AI center in Central Java; launched CoE & internships for key sectors

Major investments

USD 200 mn AI center

Collaboration with NVIDIA to establish an AI Center of Excellence in Central Java for AI-cloud infrastructure and talent training

AI experience center

Opened at Solo Technopark (Aug 2024) with 5G-powered AI applications in smart cities, arts, and F&B

AIonOS Partnership

Developing AI for food security, tourism, and talent development

AI factory

USD 250 mn investment via Lintasarta, equipped with NVIDIA H100 GPUs, serving 20+ enterprise clients

Sahabat-AI (LLM Initiative)

Joint project with GoTo to build Indonesian-language AI models for localized AI solutions

Partnerships

First mobile operator in Southeast Asia to deploy AI-RAN

Announced partnership with Nokia and NVIDIA to deploy AI-RAN infrastructure across Indonesia, integrating AI with 5G Cloud RAN to enhance performance, efficiency, and scalability

Deployed world's first full-stack digital monetization platform

- Partnered with Ericsson, to deploy world's first full-stack Digital Monetization Platform (DMP), enabling real-time monetization, 5G readiness, and advanced B2B solutions
- Serves around 100m Indosat subscribers across Indonesia
- The collaboration also extends to AI-driven innovations, accelerating monetization and next-gen telecom capabilities

Partnership with Accenture to accelerate sovereign AI cloud

Indosat Ooredoo Hutchison, through its unit Lintasarta, partnered with Accenture to accelerate Indonesia's sovereign AI Cloud, leveraging the Accenture AI Refinery platform

AI Deployments

- **Network Optimization**
Digital Intelligence Operations Center (DIOC) for AI-driven performance improvements
- **Customer Experience**
AI-driven hyper-personalization & customer retention strategies
- **AI Cloud Infrastructure**
Sovereign AI Cloud Platform with Accenture ensuring data sovereignty

Governance & Compliance

- Developing sovereign AI Cloud in collaboration with Accenture for Indonesian enterprises
- Ethical AI development in line with Indonesian regulations



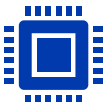
Telstra | AI Transformation

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AI is the technology of our time, and it is not enough to simply be users of that technology.

Vicki Brady

Chief Executive Officer, Telstra

Key AI pillars	Objectives	Implementations
 AI Innovation & Services	Accelerate enterprise-wide AI adoption through strategic partnerships and large-scale investments.	\$700M joint venture with Accenture to accelerate AI roadmap and enterprise tools.
 Enterprise AI Integration	Embed AI tools into workflows to boost employee productivity and enhance customer service.	Integrated AI tools like 'Ask Telstra' and 'One Sentence Summary' into workflows to enhance staff productivity and customer service.
 AI Infrastructure Development	Build high-capacity, reliable network fiber to support growing AI data and compute demands	Extended Intercity Fibre Network (~1,800 km) with Microsoft as anchor tenant; first routes live; aiming for 14,000 km by 2027

Major investments

\$700 Million Joint Venture with Accenture

Formed a 7-year partnership to accelerate Telstra's AI and data modernization roadmap.

Microsoft Partnership

Invested in 21,000 Microsoft 365 Copilot licenses, representing Australia's largest deployment of the generative AI service.

Quantum Joint Venture

Reduced AI vendors from 18 to 2 by establishing strategic partnerships with Accenture and Quantum to streamline AI initiatives.

Investment in AI Infrastructure

Investing in ultra-fast Intercity Fiber Network and subsea cable network enhancement to boost AI infrastructure capacity.

Partnerships

Formed Joint Venture with Accenture to accelerate AI roadmap

Formed a 7-year, \$700 million joint venture with Accenture to accelerate AI roadmap, develop agentic AI capabilities, and embed responsible AI practices.

Expanded Microsoft Partnership to enhance AI infrastructure and tools

Expanded strategic partnership with Microsoft to enhance AI infrastructure, including deploying 21,000 Microsoft 365 Copilot licenses—the largest in Australia.

Collaborated with Cisco to design resilient AI network solutions

Collaborating with Cisco to design AI solutions improving network autonomy and resilience through advanced telemetry and edge computing.

AI Deployments

- **Ask Telstra & One Sentence Summary**
In-house generative AI tools integrated into customer service operations to assist frontline teams with knowledge access and customer interaction summaries.
- **AI-Powered Insights Platform (Insights Hut)**
AI-driven platform consolidating \$40 million in research assets, providing personalized access to insights for executives and strategy teams.
- **AI-Powered Autonomous Network Vision**
Developing a highly autonomous network by 2030 using AI, machine learning, and digital twins to enable self-healing network capabilities.

Governance & Compliance

- Operates a Responsible AI Policy aligned with Australia's AI Ethics Principles, embedding accountability, fairness, and transparency in AI systems.
- Established the Risk Council on AI & Data (RCAID) and Executive Data & AI Council for governance and lifecycle oversight of AI systems.



LG Uplus | AI Transformation

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No matter how innovative AI technology is introduced, we cannot create true customer impressions if quality is not supported.

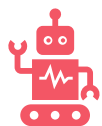
Hwang Hyeon-sik

Chief Executive Officer, LG Uplus

Key AI pillars

Objectives

Implementations



AI Agent Ecosystem

Build a scalable AI agent ecosystem across customer interactions

Launched ixi-O, integrating Google Gemini AI, deployed AI across 8+ platforms



Enterprise AI Integration

Expand B2B AI solutions to drive ₩2 trillion revenue by 2028

Developed sLLM (ixi-GEN), deployed AI in smart factories, scaled Agent Assist



AI Cloud & Infrastructure Development

Establish sovereign AI cloud and AI-ready infrastructure

Built hyperscale data center; partnered with AWS; developed AI chips with DeepX

Major investments

₩3 Trillion AI Investment Plan

Announced investment of ₩3 trillion (~\$2.1 billion) in AI by 2028 to transform into an AI-centric company.

AWS Partnership for AI Cloud

Partnered with AWS to develop Korean sovereign AI cloud and co-optimize LG's ixi-GEN with AWS's Nova.

Google Partnership for AI Agent

Partnered with Google to integrate Gemini AI into ixi-O for personalized AI call agent services.

Hyperscale AI Data Center Construction

Building 100,000+ server hyperscale AI data center in Paju, Gyeonggi Province, for AI workload processing.

Partnerships



Partnered with Google to integrate Gemini AI into ixi-O platform

Integrating Google Gemini AI into ixi-O for advanced call summarization, expanding to multimodal AI capabilities.



Collaborated with AWS to develop sovereign AI cloud and models

Collaborating with AWS to develop sovereign AI cloud and optimize ixi-GEN and AWS Nova language models.



Co-developed AI-powered smartphone assistant

Co-developing AI-powered smartphone assistant combining ixi-O and Samsung Galaxy AI.



Partnered with DEEPX to develop AI chips

Partnering with DEEPX for AI chip development to power on-device AI in robotics, mobility, and telecom.

AI Deployments

- **ixi-O AI Agent**
On-device AI call agent with voice phishing detection, transcription, and customer interaction summaries deployed across customer services.
- **AI Contact Center Expansion**
Scaling 'Agent Assist' from 200 to 2,300 agents, achieving 30% operational efficiency improvement.
- **Smart Factory AI Solutions**
Deploying AI for digital twins, predictive maintenance, and big data analytics to enhance manufacturing operations.

Governance & Compliance

- Standardized EIA procedure to assess risks across AI lifecycle.
- Aligning AI systems with PIPA (Korea), GDPR, and preparing for EU AI Act.



KT Corporation | AI Transformation

“*True AI innovation demands global collaboration—while preserving sovereignty over data and infrastructure.*”

Kim Young-shub

Chief Executive Officer, KT Corporation

Key AI pillars

Objectives

Implementations



AI Innovation & Services

Transform into an AICT leader by embedding AI across telecom, enterprise, and media operations.

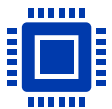
Invest ₩7T (~\$5.4B) by 2027 in AI tech, infra, & services; deploy Mi:dm LLM, AI agents, voice AI.



Enterprise AI Integration

Enhance AI-driven customer & enterprise solutions to deliver scalable & localized Korean AI offerings.

Built AI Studio Lab for media AI; AI Meister/Operator for networks; AI contact center deployment.



AI Infrastructure Development

Build an AI-ready infrastructure ecosystem for AI innovation, sovereignty, & autonomous data centers

AI Data Center Demo Center (2025), Databricks Data Platform, AMD/NVIDIA AI hardware deployment

Major investments

₩7 Trillion AI Investment Plan

Investing ~\$5.4B by 2027 across AI infrastructure, AI services, core technologies.

Microsoft Strategic Partnership

Five-year, multibillion-dollar partnership for AI innovation, AI solutions tailored to Korean language & culture.

Investment in AI Chipmaker Rebellions

Led \$124M Series B round to develop Korean AI chips for cloud & telecom

AI Data Center Demonstration Center

Launching 2025; first step toward autonomous, sustainable AI data centers.

Partnerships



Strategic Collaboration with Microsoft to Build AI Cloud and GPT Model

Multibillion-dollar collaboration: custom GPT-4o Korean model, sovereign public cloud, AI transformation services, upskilling 19,000+ employees.



Integrated Palantir AI Solutions for Enterprises and Joint Market Ventures

Integrated Palantir's AI solutions for enterprise clients; co-developing AIP Bootcamp; joint ventures in domestic & U.S. markets.



databricks

Partnered with Databricks to Scale AI Platform and Advance Innovation

Scalable AI & data platform; supports AI innovation in regulated industries; AI Center of Excellence for advanced training.

AI Deployments

- **AI Agent Solutions**
Mi:dm-based AI agent solutions deployed for customer service, combining natural language processing, real-time transcription, and AI voice phishing detection for improved security.
- **AI-Integrated Media Production**
AI Studio Lab integrating AI throughout the content lifecycle—from investment review to production and distribution—enhancing media efficiency, accuracy, and quality.

Governance & Compliance

- Oversees ethical AI practices, ensuring fairness, transparency, and safety across deployments(RAIC)
- Embeds AI ethics education into employee programs with grievance channels for reporting ethical concerns.



Rakuten Mobile | AI Transformation

“*We’re not competing with OpenAI—we’re building vertically integrated, specialized AI powered by Rakuten Mobile’s data.*”

Hiroshi Mikitani

Chief Executive Officer, Rakuten Group

Rakuten Mobile

Key AI pillars	Objectives	Implementations
 Generative AI Enablement	Democratize AI usage across 100% of business functions through Rakuten AI for Business platform.	Launched Rakuten AI for Business with customizable prompts, RAG features, and utilization dashboard, now used by 30,000+ employees.
 AI-Nization of Business Operations	Build proprietary Japanese-language AI models to enhance customer experience and operational efficiency across the Rakuten Group of services.	Developed Rakuten AI 2.0 and Rakuten AI 2.0 Mini models, optimized for Japanese language, deployed across internal and external use cases.
 Cloud-Native AI Infrastructure	Enable AI-driven telecom and enterprise services through scalable, cloud-native infrastructure	Deployed a cloud-native, AI-powered mobile network with Intel and Cisco partnerships

Major investments

\$10 Million AI & 6G R&D Investment (India)

Invested in Bengaluru R&D center to enhance AI capabilities and 6G research, driving AI-nization and innovation in telecom services.

Investment in Proprietary AI Models

Launched Rakuten AI 2.0 and Rakuten AI 2.0 Mini in Dec 2024 to deliver localized AI solutions for Japanese language tasks.

Launch of Rakuten AI for Business

Introduced in Jan 2025 as a GenAI platform supporting document creation, translation, research, and brainstorming.

Partnership with OpenAI

Collaborating to co-develop telecom-specific AI solutions targeting customer service, predictive maintenance, and network optimization.

Partnerships



Partnered with OpenAI to Co-Develop Telecom-Focused AI Solutions

Joint development of telecom-focused AI solutions for customer experience, network optimization, and predictive maintenance..



Collaborated with Universities to Advance Open RAN and AI Research

Partnered with National Institute of Informatics, Tokyo Institute of Technology, and Technical University of Munich to advance AI + Open RAN research and AI-driven network digital twins.



Formed Strategic Collaborations to Embed AI Apps into Open RAN

Collaborated with zTouch Networks to embed AI rApps and xApps into Open RAN; partnered with Science Arts to integrate Buddycom communication with Rakuten's AI ecosystem.

AI Deployments

- **Rakuten AI for Business**
A browser-based GenAI platform enabling employees to perform document creation, translation, brainstorming, and analysis; features job-specific prompts and RAG function integrated with internal data.
- **AI in Network & Field Operations**
AI applied to Open RAN management, real-time optimization, and detecting network anomalies like “sleeper cells”; used in technician verification via photo analysis.

Governance & Compliance

- Oversees AI ethics through an AI Code of Ethics (established July 2024), promoting fairness, transparency, compliance, and safety across AI initiatives.
- Governance structures report AI activities to the AI & Data Committee, escalating insights to the Board of Directors for transparency and accountability.



KDDI | AI Transformation

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We're advancing Life Transformation by combining AI with next-gen connectivity to empower every individual.

Makoto Takahashi

Chief Executive Officer, KDDI Corporation

Key AI pillars

Objectives

Implementations



Promoting Data-Driven Practices & Generative AI

Empower enterprise and non-tech users with generative AI for productivity and innovation

Launched internal LLM apps (e.g., legal summaries, meeting notes), “au Support AI Advisor” for CX, and partnered with dotData & AI Dynamics for enterprise AI.



AI Infrastructure Development

Build Asia’s largest, sustainable AI data center to power generative AI workloads

Acquired Sharp Sakai Plant for Osaka AI Data Center (1,000-GPU GB200 NVL72); built liquid-cooling, renewable energy setup.



AI Governance

Ensure ethical, transparent, and risk-managed AI deployment across business lines

Published AI R&D & Utilization Principles; established oversight via HAIP Transparency reporting aligned with OECD & NIST

Major investments

Investment in Sakana AI

Invested in Tokyo-based startup to support the development of generative AI foundation models, providing access to data and computing resources

Partnership with Groq, Inc

Invested in US -based Groq, Inc., advancing generative AI applications to promote high-speed AI inference technology in Japan

Google cloud partnership

Integrated Gemini AI into KDDI’s metaverse and Web3 platform (αU) for AI-driven shopping and entertainment

Elyza acquisition

Acquired majority stake in Japanese AI startup to strengthen domestic AI model development

AWS partnership

To assist businesses and municipalities in adopting generative AI for digital transformation

Partnerships



Google Cloud

Partnered with Google Cloud to integrate Gemini AI into KDDI's metaverse

Leveraging Google Cloud's Gemini AI to enhance user experiences in its metaverse and Web3 platform, αU.



Collaborated with AWS to support businesses and municipalities in adopting generative AI

KDDI and AWS are working together to drive digital transformation across industries by providing generative AI solutions for enterprises and local governments.



Partnered with Sharp to develop one of Asia's largest AI data centers in Osaka

KDDI and Sharp are jointly building a large-scale AI data center in Osaka to support the growing demand for AI computing power.

AI Deployments

- **AI Data Center Development**
Osaka-based AI data center, featuring NVIDIA GB200 NVL72 computing platforms.
- **WAKONX Business Platform**
Network Layer: Optimized 5G and IoT networks.
Data Layer: Secure AI-driven data management.
Vertical Layer: AI solutions tailored for industries.

Governance & Compliance

- Formulated a business ethics committee that oversees AI governance and compliance.
- Developed an internal business ethics helpline for AI ethics and compliance reporting.



Singtel | AI Transformation

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AI-driven innovation will be front and centre as we bring its transformative powers to our retail and enterprise customers

Yuen Kuan Moon

Group Chief Executive Officer, Singtel

Key AI pillars	Objectives	Implementations
 AI Access Democratization	Democratize AI by providing GPU-as-a-Service, AI cloud, and end-to-end orchestration for enterprises and public sectors	Launched RE:AI (AI cloud + orchestration via Paragon), GPUaaS via Nxera & NVIDIA, and partnerships with ScaleAI and Bridge Alliance
 Enhancing Customer Experience	Elevate support and engagement through AI-driven tools in customer operations.	AI-enabled chatbots, call-centre summarization, legal migration to generative assistants; integrated into 5G edge for live analytics via Nvidia
 Enterprise AI & Developer Enablement	Empower enterprises and developers to deploy and scale AI with training, R&D ecosystems, and HPC for innovation	Set up AI Accelerator & training with NUS/NTU/AI Singapore; hosted research via NSCC (RE:AI R&D platform); expanded Nxera DC with sustainable GPU-ready capacity (58MW DC-Tuas)

Major investments

Investment in ST Telemedia Global Data Centre

In collaboration with Kohlberg Kravis Roberts & Co, a global investment firm, invested SGD 1.75 bn into STT GDC to enhance AI data center infrastructure

Earmarked investment for fiscal year 2025

The company has earmarked SGD 1 bn for data centers and AI-related equipment, reflecting a notable increase from the SGD 2.2 bn total capex in fiscal 2024

Developing AI training programs

Partnered with AI Singapore, Nanyang Technological University, National University of Singapore to develop AI training programs for workforce upskilling

Partnerships



Partnered with Scale AI to enhance the accuracy of generative AI solutions

RE:AI partnered with Scale AI to accelerate AI adoption across industries by improving model training, data labeling, and enterprise AI applications.



Formed a partnership with H2O.ai to deliver Generative AI-as-a-Service

RE:AI partnered with H2O.ai to enable businesses to deploy AI models at scale, improving automation, insights, and decision-making processes.



Formed a strategic partnership with Nscale to unlock global GPU capacity

Collaborated with Nscale to provide enterprises with high-performance and cost-effective AI computing resources.

AI Deployments

- **RE:AI – Singtel’s AI Cloud Platform**
Provides AI compute infrastructure, AI workspaces, and orchestration tools.
Integrated with Singtel’s Paragon platform for seamless AI deployment.
- **SingVerify – AI for Identity Verification & Fraud Prevention**
Uses AI to match customer phone numbers with registered data to prevent account takeovers & unauthorized transactions.

Governance & Compliance

- Collaborating with GSMA and global telcos to develop the Responsible AI Maturity Roadmap.
- Adheres to Personal Data Protection Act (PDPA) in Singapore & other global privacy laws.



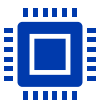
NTT Docomo | AI Transformation

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Developing 6G is our chance to shape AI-native networks that drive sustainability, efficiency, and next-generation customer experiences

Takaaki Sato

Chief Technology Officer, NTT Docomo

Key AI pillars	Objectives	Implementations
 Enterprise AI Literacy Enablement	Empower employees with AI tools and training for an innovation-driven workforce.	Launched internal use for LLM value-added platform with RAG & ethics filters; hosted org-wide promptathons, no-code app workshops; ~10K MAUs and 3 M monthly LLM calls
 AI Integration Across Business Operations (BizOps)	Embed generative AI into customer support, legal, and operational workflows	Deployed Alli-powered apps: legal summary, meeting minutes, call-centre Q&A; integrated Databricks platform to analyze usage and boost productivity 10×
 AI-Optimized Network & Open RAN	Build flexible, cost-effective AI-native mobile networks via O-RAN.	Commercialized Open RAN since 2020 (>27 M subs); launched OREX ecosystem and joint venture (OREX SAI); using AWS-EKS for 5G Open RAN; Nokia, NEC, Nvidia-powered vRAN stacks

Major investments

\$3.3 Billion AI Infrastructure Investment (with Toyota)

Investing to develop an AI platform for autonomous driving, improving driver-assist technologies and traffic safety.

Launch of “tsuzumi” Large Language Model

Developed compact, energy-efficient proprietary LLM to support AI applications across NTT Group companies.

Establishment of NTT AI-CIX Inc.

Formed in 2024 to transition from individual AI projects to interconnected AI services across industries.

6G AI-Native Air Interface Collaboration

Partnered with SK Telecom, Nokia, and NTT to co-develop AI-native 6G air interface for optimized wireless communication.

Partnerships



Partnered with Samsung for Joint Research on AI Applications

Joint research on AI applications for next-generation mobile communications, improving quality and efficiency.



Established Open RAN Ecosystem with Red Hat for 5G Solutions

Established an ecosystem including Red Hat to promote open, interoperable 5G RAN solutions and best-of-breed deployments.



Collaborated with SK, Nokia, NTT to Co-Develop AI-Based 6G Interface

Partnered with SK Telecom, Nokia, and NTT to co-develop AI-based 6G air interface; conducting real-world validation tests.

AI Deployments

- **AI-Driven Customer Recommendations**
Deployed AI technology at customer touchpoints to personalize interactions, improving satisfaction and subscription rates.
- **Retail AI Automation Solutions**
Combined AI and surveillance cameras for automated customer service and marketing in retail settings to address labor shortages.

Governance & Compliance

- Follows comprehensive AI Risk Management Policy, categorizing risks (prohibited, high, limited) and enforcing dual-phase assessments.
- Implements AI Governance Structures via Co-CAIOs and AI Governance Office overseeing risk management across NTT Group.

Measuring AI Maturity of Telcos

Key findings from our research



APAC: AI Telcos Leaders vs Challengers

Leaders Group



Challengers Group



Note : We benchmarked leading APAC telcos using our AI maturity framework. This visual contrasts the top 10 AI Leaders with the next 10 Challengers—offering a clear view of who's ahead and who's catching up.

AI Maturity Breakdown: How Leaders Outperform the Rest

Component	Leaders Avg. Score	Challengers Avg. Score	Reasoning
Strategic Alignment	4.92 / 5	2.38 / 5	Stronger C-level sponsorship, defined AI roadmaps, and consistent KPI/ROI tracking
People & Processes	4.94 / 5	2.93 / 5	Robust AI talent strategy, enterprise-wide literacy programs, and formal testing & scaling processes
Technology & Applications	4.81 / 5	3.03 / 5	Mature GenAI tech stacks, cloud-native infra, and seamless integration into core systems
Data Management	3.90 / 5	2.69 / 5	Centralized data pipelines, improved accessibility, and stronger data governance
AI Governance, Risk & Ethics	4.09 / 5	2.34 / 5	Formal AI ethics policies, lifecycle governance, and regulatory alignment
Innovation & Experimentation	4.86 / 5	3.03 / 5	More investment in AI R&D, strong PoC pipelines, and better ecosystem collaboration

Emerging AI Initiatives Across APAC's Challenger Telcos (1/2)



Network & Customer Intelligence

- Uses **Jio Brain**, an in-house AIOps platform, for AI-driven network fault prediction, self-healing, and real-time optimization
- Leverages **Jio Haptik** to power intelligent customer engagement across channels using conversational AI and virtual assistants.



Customer Engagement

- Uses **Wynk Studio's AI engine** to deliver hyper-personalized audio experiences across its music platform
- Partners with **Airtel IQ** and conversational AI solutions to automate customer interactions and drive self-service



Customer Support

- Launched **GoChat Super App** powered by AI for messaging, payments, and personalized offers
- Enables **hyper-personalized engagement** through intelligent automation and recommendations



Network Optimization

- Operates **Mindu Brain**, its proprietary AI platform, to enable real-time network self-optimization and intelligent fault management
- Leverages **AI-powered orchestration** across 5G infrastructure to automate maintenance and improve service reliability



AI-Powered CX & Network Intelligence

- Deployed **Mari-AI**, a voice + chat virtual assistant via **True Voice**, handling 22M+ interactions with 92% success in 2024
- Launched **BNIC**, an AI-driven center for real-time network monitoring, fault detection, and anomaly resolution.

Emerging AI Initiatives Across APAC's Challenger Telcos (2/2)



Customer Support

- Deployed **TM One Contact Centre AI**, enabling sentiment analysis and intelligent routing for customer support.
- Uses **LLM-powered chatbots** to handle Tier-1 queries, improving resolution time and reducing agent load



AI-Enhanced Customer Service

- Launched **Globe Digital Assistant (GDA)** to automate customer service across channels with natural language understanding.
- Uses **AI-powered analytics** to monitor and enhance customer experience in real time



AI Platform & Infrastructure

- Built a **GenAI-ready infrastructure stack**, integrating cloud-native platforms for scalable AI deployment.
- Established structured **AI testing and scaling frameworks** to move pilots into production faster.



Intelligent Infrastructure & Operations

- Operates **“AI Factory” architecture** to centralize AI training, modeling, and service deployment across verticals.
- Embedded **AI-powered automation** into network operations for real-time fault detection and predictive maintenance.



Customer Support

- Established a centralized **AI Factory model** to drive intelligent service innovation across provinces and industries
- Deployed **AI-enabled customer support and infrastructure ops** as part of its enterprise service platform



Takeaways That Redefine AI Maturity in APAC Telcos

Strategically curated foundations give leaders an advantage



Strategy starts in the boardroom

e& UAE, SK Telecom, and China Telecom have made AI a board-level priority — with C-suite ownership, aligned KPIs, and clear execution paths. They treat AI as strategy, not experimentation.



CoEs are scaling engines, not experimental playgrounds

Leaders like Airtel and Indosat have evolved AI Centers of Excellence into cross-functional execution hubs — upskilling frontline teams, not just engineers. AI champions are now embedded in business units, not just IT.



Owning infrastructure is a strategic edge

SoftBank, SKT, and Telstra are not just consuming AI — they're building their own infrastructure stack. From hyperscale compute to ML platforms, they've realized: owning AI infra is owning future value.

Effective leaders scale AI end-to-end



Unified data beats isolated dashboards

Even high scorers struggle with fragmented systems. But telcos like Rakuten Mobile and Telkomsel are pushing toward governed, real-time, API-accessible pipelines — not just dashboards.



Build Responsible AI into delivery of outcomes

Governance isn't about lofty principles — it's about explainability, risk controls, and compliance. True Corporation and e& UAE are already embedding responsible AI frameworks into delivery pipelines.



Innovation only matters if it scales

Top telcos like Jio, Globe, and SK Telecom don't stop at GenAI pilots — they industrialize. These leaders co-build with startups, track PoC-to-scale conversions, and focus on real impact metrics.

Growing influence of AI in telecom boardrooms spark strategic realignment and industry-wide disruption

How will telcos evolve in the AI era?

AI CoEs Will Evolve into Enterprise-wide AI Fabric

Telcos will expand AI Centers of Excellence into full-stack delivery hubs that support organization-wide enablement, standardization, and integration — becoming the core of AI operating models.

Real-Time Data Infrastructure Will Become the Norm

To support GenAI, telcos will accelerate investment in unified, real-time, and governed data platforms — moving away from batch systems to meet latency, scale, and security demands.

PoC-to-Production Metrics Will Shape AI Strategy

Success will no longer be defined by experimentation, but by execution. Telcos will track PoC conversion, industrialize AI delivery, and build internal frameworks to move AI from labs to production sprints.

Proprietary AI Hardware Expansion

Telcos in mature markets looking to diversify will increasingly explore in-house chip development and AI compute infrastructure to secure control over AI workloads and performance.

AI-Driven Customer Experience Innovation

AI-powered contact centers, autonomous stores, and AI assistants will accelerate customer engagement transformation across physical and digital channels.

Scaling AI Governance and Compliance

Following the lead of frontrunners, emerging telcos will formalize AI ethics frameworks, fairness audits, and certification processes to meet rising regulatory and consumer trust demands.

Research Methodology

To evaluate the AI maturity of leading telecom operators across the Asia-Pacific region, Twimbit conducted an extensive secondary research study involving public disclosures, company reports, investor presentations, press releases, and news sources across 15 countries in APAC.

The research process involved systematically mapping telcos' AI initiatives, investments, partnerships, deployments, and governance practices across a proprietary AI Maturity Framework of 6 main components and 30 sub-components.

Each telco was evaluated and benchmarked based on publicly available data, supplemented by expert interviews and analyst insights where applicable.

The final report synthesizes these findings to provide a strategic overview of the AI maturity landscape in the APAC telecom industry.

	Nations	No. of Telcos
	Indonesia	3
	Australia	2
	UAE	1
	Korea	3
	India	4
	Taiwan	2
	Philippines	2
	Japan	4
	Singapore	2
	Malaysia	3
	China	3

Top 10 APAC Telcos AI Maturity Scores

This table presents the AI maturity scores for 10 top APAC telcos, assessed across six core dimensions in our proprietary AI Maturity Framework. Scores reflect maturity levels ranging from **1 (Foundational)** to **5 (Transformational)**

Telco	Strategic Alignment	People & Process	Technology & Applications	Data Management	AI Governance, Risk & Ethics	Innovation & Experimentation	Total
SK Telecom	24	24	24	12	24	24	132
SoftBank	23	20	19	15	21	23	121
Indosat	22	25	25	21	8	17	118
Telstra	16	15	11	18	18	16	94
LG Uplus	11	15	15	13	17	18	89
KT	9	23	14	11	14	14	85
Raukten	8	24	16	11	14	12	85
KDDI	14	13	15	8	14	20	84
Singtel	11	19	14	9	17	14	84
NTT Docomo	9	13	13	9	13	22	79

Scoring Methodology

✓ Scoring Scale (1 to 5, but redefined for practicality)

Score	Meaning
1	No information available or no evidence of activity (default baseline) (NA)
2	Very limited activity: maybe early signs, mentions, or pilots with no depth or clarity
3	Clear evidence of structured efforts; some implementation visible but not widespread or mature
4	Strong activity; implemented across several areas or units with measurable outcomes
5	Mature, enterprise-wide capability; well-documented, scaled, and optimized with best practices

Note: This scale is uniform across all sub-components. It's flexible enough to interpret any kind of evidence and still score it meaningfully.

Innovating **experiences**
