

Huawei Unveils AI-Centric Network Solutions at MWC Barcelona 2025, Seeks to Maximize 5G Value in the Age of AI



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• Emergence of high-quality, low-cost, and open-source AI models is accelerating innovation and transforming society at multiple levels

Doha-Qatar March 4, 2025 – At MWC Barcelona 2025, Huawei presented its vision for how carriers can leverage AI to unleash the full potential of 5G networks. Li Peng, Huawei's Corporate Senior Vice President and President of ICT Sales & Service, and Yang Chaobin, Director of the

Board and CEO of the ICT Business Group, outlined how the symbiosis between 5G-Advanced (5G-A) and AI technologies will drive double-digit growth in both data usage and average revenue per user.

"We're rapidly entering a fully intelligent world. Intelligent applications are spreading everywhere, placing new demands on networks," said Li in his keynote. "By embracing and evolving 5G, we can unlock the infinite potential of mobile networks. Huawei is willing and ready to work with carriers and industry partners worldwide to promote digital enablement, reinforce network foundations, and bring AI to all. Together, we can shape the D.N.A. for an intelligent world."

Evolving Networks to Meet AI-Driven Demands

The emergence of high-quality, low-cost, and open-source AI models is accelerating innovation and transforming society at multiple levels – from individualized consumer experiences to intelligent organizational collaboration and more inclusive intelligence for everyone.

AI is also fundamentally changing human-machine interaction (HMI), evolving from text-based communications to multi-modal interactions incorporating voice, gestures, and more. As a result, HMI is more real-time and convenient than ever, giving rise to a new wave of innovative

applications. This transformation requires networks capable of providing guaranteed latency, which demands ongoing evolution from 5G NSA to 5G SA, and eventually to 5G-A. Carriers can adopt innovative technologies like Control and User Plane Separation (CUPS) and Guaranteed Bit Rate (GBR) to ensure deterministic latency for specific scenarios.

On the other hand, AI-enabled content production and distribution will place unprecedented demands on networks. AIGC technology now allows for one-click generation of hour-long 2D and 3D videos, while AI recommendations deliver more personalized content to broader audiences. These developments will cause network traffic to surge over the next five years, requiring more spectrum, greater network capacity, and much larger uplink and downlink bandwidth.

Huawei's AI-Centric Network Solution

Yang Chaobin introduced Huawei's AI-Centric Network solution, designed to help carriers seize emerging AI opportunities. "It revolutionizes network capabilities to enable all-domain connectivity. It will power a shift towards application-oriented O&M and will reshape telecom service and business models to take full advantage of new opportunities presented by AI," he explained.

 $The \, solution \, adopts \, a \, four-layered \, approach: \,$

All-domain connectivity—With in-depth collaboration between AI and networks, carriers can optimize resource orchestration for routing and bandwidth, providing intelligent applications with universal network access, ultra-high uplink and downlink, and SLA assurance.

Application-oriented O&M – As AI gives rise to more complex service scenarios with diverse experience requirements, networks must shift from resource-oriented to application-oriented O&M. Huawei's Telecom Foundation Model supports predictive and proactive O&M, experience optimization based on application-level awareness, and tailored operations. According to Li, AI agents with self-learning capabilities can predict and locate faults in seconds, increasing troubleshooting efficiency by 30%.

Enhanced AI-to-X services – AI-centric networks can deliver tailored experiences by assigning the exact levels of bandwidth, latency, and reliability needed for different scenarios. They can evolve to support person-to-agent and agent-to-agent interactivity while enabling ubiquitous connectivity to accelerate AI adoption in public services.

Innovative business models – Different experience requirements enable carriers to explore new monetization strategies. "Carriers can go beyond monetizing traffic and start monetizing experience itself," noted Li. Carriers worldwide are already exploring monetization based on factors like speed, latency, and VIP benefits, with some expanding into the B2B2C market by

exposing network capabilities through Open APIs.

Accelerating 5G-A Deployment

Both executives emphasized that early movers are already scaling up 5G-A deployment across more than 200 cities worldwide. Chinese carriers are currently working with over 100 industries to provide AI New Calling services through Open APIs, increasing income from industry customers tenfold.

According to third-party data, over one billion people will use cloud phones and cloud drives by 2030, each requiring fast access to cloud computing power. Additionally, intelligent in-vehicle applications will need comprehensive coverage across urban and rural areas to provide continuous mobility experiences.

"The opportunities are huge, and the time to act is now," concluded Li. "Pioneers are already taking solid steps forward, unlocking incredible new value."

In 2025, commercial 5G-Advanced deployment will accelerate, and AI will help carriers reshape business, infrastructure, and O&M. Huawei is actively working with carriers and partners around the world to accelerate the transition towards an intelligent world.

MWC Barcelona 2025 is being held from March 3 to March 6 in Barcelona, Spain. During the event, Huawei is showcasing its latest products and solutions at stand 1H50 in Fira Gran Via Hall 1.

For more information, please visit: https://carrier.huawei.com/en/events/mwc2025