Maximizing
New Growth Opportunities
in the Mobile AI Era

"The opportunities are great. And the best time to act is now."

We are rapidly entering the mobile AI era, where artificial intelligence (AI) will become an integral part of every person's life, every home, and all industries. This trend will stimulate new demand and present incredible new growth opportunities for the ICT industry.

Multimodal AI devices will enable new forms of interaction. This will give rise to a better experience and greater productivity.

According to IDC, by 2028, global AI smartphone shipments will reach more than 900 million units, and there will be over 1,000 AI-native devices on the market. We will interact with these devices not only through touch, but also in many new ways, including voice, gestures, and even facial expressions. These interactions will be smoother and roughly 300% more efficient. For example, the newest generation of AI glasses can read lips with over 95% accuracy in noisy environments.

AI agents will change the way we work and live, bringing intelligent services everywhere. By 2030, most people will have a personal AI agent, and AI robots will play a key role in many industries. They will work nonstop to meet people's needs in all kinds of different scenarios, generating and processing over 100 times more data than we do today. This will provide a wealth of data for boosting digital and intelligent productivity.

These new forms of interaction and intelligent services will drive an unprecedented surge in data, which will drive structural changes in traffic models. For example, training large models will require incredibly rapid transmission between data centers. At the same time, AI applications and AI-generated content (AIGC) will need to transmit data between edge, cloud, and devices. This means there will be a rise in east-west traffic, and even mesh connections between multiple types of devices and hosts. With these structural changes in traffic models, network optimization will be more critical than ever.

These are a few examples of the technological advancements and growing demand that we will see in the mobile AI era. If we want to seize new opportunities and pave the way for ongoing success, the industry needs to reshape capabilities across four areas: network services, infrastructure, O&M, and business models.

First, mobile products and services are the perfect access points for AI, so carriers can reshape their service portfolios to better meet demand. For individuals, homes, and vehicles, carriers can provide intelligent services via common touch points, such as calls and messaging, home services, and car cockpits.

5G New Calling is a great example. One Chinese carrier uses AI to help 24 million subscribers create their own digital avatars for voice calls and to provide real-time translation services. Moving forward, the carrier will introduce more value-added services, such as fault reporting, appointment booking, and meeting management.

There is also huge room for growth in the B2B market. Carriers can provide small and medium-sized enterprises (SMEs) with affordable AI services and devices, such as out-of-the-box kits for AI-powered shop management. These can help meet SME demand for rapid AI adoption. In addition, carriers can combine connectivity, networking, and AI capabilities to help enable the intelligent transformation of larger industry customers.

Second, carriers need to reshape network infrastructure to support a wide range of experience requirements for AI services. For example, network round-trip time (RTT) needs to be less than 50 milliseconds to ensure that AI assistants can deliver the most natural interactive experience. Carriers can also build AI-centric networks that support deterministic access, elastic scheduling, and lossless WAN. This will help deliver on-demand, reliable connections between cloud, edge, and devices.

Third, more complex networks means more challenging O&M. AI can support agile service provisioning, help guarantee user experience, and make O&M much more efficient. Carriers can use AI agents and copilots to handle O&M, gradually phasing out traditional service operations and network operations centers. For example, AI agents can automate task planning and orchestration for network maintenance, solving all software problems which account for 40% of all. At the same time, copilots can help field engineers quickly locate and fix the remaining 60% of problems which are caused by hardware.

Last but not least, carriers should consider reshaping their business models based on new capabilities in network services, infrastructure, and O&M. This will be crucial to go beyond traffic and start monetizing experience, and ultimately generate greater business value. Through AI-based services like New Calling and AI Hub, carriers can open up new revenue streams based on computing power, data storage, and VIP services. Carriers can also learn from cloud service models and expose network capabilities with open APIs. By monetizing network capabilities through open APIs, carriers can expand into the B2B2C market.

For example, some livestreaming companies and insurance companies are integrating network experience assurance and New Calling capabilities into their own services by using open APIs provided by a carrier. It's a win-win: the companies themselves can improve service quality, and the carrier has grown revenue from these companies by a factor of ten.

The journey is long, but we will reach our destination if we stay the course. In the mobile AI era, there are two things we can do to maximize new growth opportunities. First, we can use AI to automate network O&M, improve network efficiency, and deliver an unparalleled experience. Second, we can prepare networks to support AI product innovation and ecosystem development.

Huawei is ready to work with carriers and industry partners to make the most of networks for AI, and AI for networks. Together, we can unleash incredible new value.

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