Creating the intelligent future

Imagining the future is the job of science fiction. Building it depends on technology. Huawei has released a full-stack, all-scenario artificial intelligence (AI) solution with the aim of bringing intelligence everywhere – to every person, every home, and every organization. According to Huawei's projections, the global AI market is set to reach US$380 billion by 2025. Ninety percent of this will be generated by the enterprise market. Over the next decade, the home of AI will be industry.

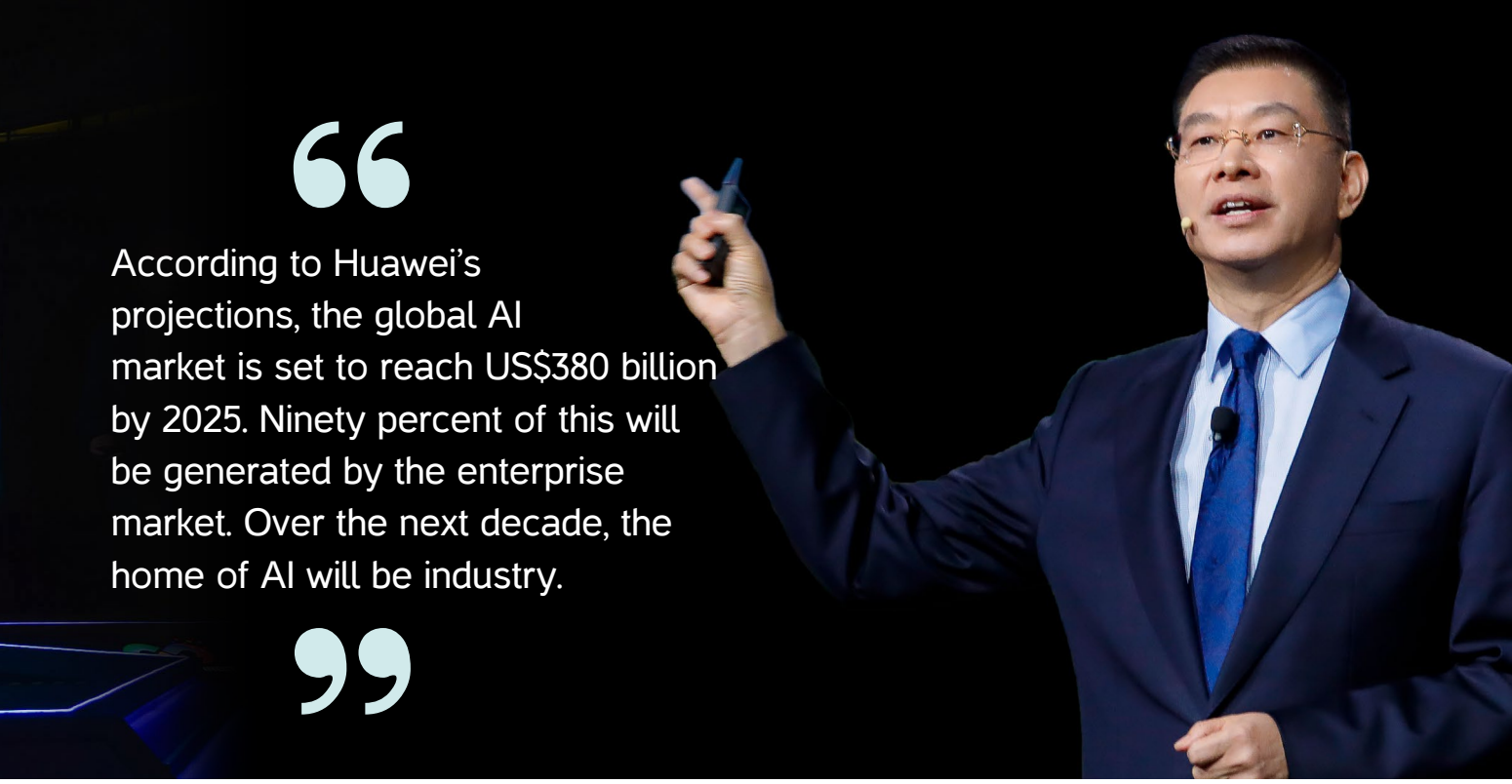
By William Xu, Huawei Director, Chief Strategy Marketing Officer

Three key points to understanding industry AI

First, scenarios are the starting point. We often ask what AI can do. But we should be asking: What do we want it to do? What problems do we want it to solve? And how can we use AI to achieve it?

Second, industry wisdom is the breakthrough point. As the saying goes, "old horses know the way". In industry, the "old horse" is expert wisdom. We need to transform the experience of these "old industry horses" into AI skills.

Third, value is the return point. AI applications create business value, industry value and social value. At the same time, value-based



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implementation can produce supplementary data, making AI smarter.

Three scenarios where industry AI comes into play

Scenario 1: bulk repetitive tasks. Examples of this are image identification and document review – bulk repetitive tasks with clearly defined goals. The core value of AI applications in this type of scenario is increased efficiency.

Scenario 2: expert experience. Many industries lack key experts. China's healthcare sector, for example, has fewer than 5,000 specialists able to screen for cervical cancer and to screen every women of the right age in China would 20 years. But with AI assistance, it's possible to quickly screen 80 percent of women with health checkups as well as 99 percent of those at risk of cervical lesions. This is a boost in efficiency of 5 to 10 times.

Scenario 3: multi-domain collaboration. This is the most complex type of scenario, and includes urban intelligent transportation systems and modern manufacturing. Traffic light signal control, for example, must consider multiple variables, including time, weather, lanes, road network, and major events. The analysis and decision-making required is clearly beyond the human brain.

Huawei announces its full-stack, all-scenario AI solution

Huawei's all-scenario solution includes high-performance public and private cloud AI chips that deliver 256T FLOPS of computing power, twice the industry average. They can be applied in edge computing solutions, for example, cameras and PCs; embedded in smartphones; and deliver ultra-low power consumption, including 1 MW Bluetooth headsets. It's the only all-scenario solution covering high-, medium-, and low-power scenarios and a compute power in the range of tens of millions.

Huawei's original Da Vinci architecture is unified and enables all-scenario application. Requiring one-time development, it's suitable for deployment, migration, and collaboration in any scenario.

> Shenzhen Airport implemented “+ AI” and smartified its infrastructure. Thanks to this, the contact stand rate has increased to 80 percent. This 10-point increase represents 4 million less people a year needing to take a shuttle to a remote gate.

Airport + AI: Facial recognition and improved contact stand rates

Shenzhen Airport has over 1,000 arrivals and departures every day. Its contact stand rate is approximately 70 percent, with a target is 80 percent, and daily passenger traffic is 120,000.

Shenzhen Airport implemented “+ AI” and smartified its infrastructure, moving from the traditional manual planning method using GNATT charts to AI automation. Thanks to this, the contact stand rate has increased to 80 percent. This 10-point increase represents 4 million less people a year needing to take a shuttle to a remote gate.

The project also included facial recognition to allow for one-stop airport clearance, reducing passenger queue time by 15 percent.

Traffic + AI: From cars watching the lights to lights watching the cars

> AI is dependent on connectivity. As a platform company, Huawei enables industries to transform digitally through 'cloud, pipe, device' based platforms, AI, and working with ecosystem partners.

Shenzhen has the highest vehicle density in any city in China, with 510 vehicles per kilometer. Covering an area of 1.5 square kilometers, Huawei's Shenzhen headquarters sees over 10,000 vehicles access the site every day.

Since June 2018, Shenzhen Traffic Police has deployed AI technology supported by Huawei Cloud at nine intersections in Bantian to implement real-time adjustment of traffic light control strategies based on traffic congestion. In the past cars watched the lights, but now it's the lights watching the cars. As a result of the project, average speeds have increased by 15 percent, saving ten minutes.

Platform + AI + ecosystem: Accelerating the intelligent world

AI is dependent on connectivity. As a platform company, Huawei enables industries to transform digitally through "cloud, pipe, device" based platforms, AI, and working with ecosystem partners.

Huawei advocates platform + AI + ecosystem. Technology leadership is the foundation of the platform. With its superior ICT technology, Huawei continues to expand its technical capabilities in AI and maintain its lead. Second, the platform must remain open. Third, the platform must be fair. Huawei and ecosystem partners will jointly build an ecosystem based on fair, win-win, cooperative relationships. Huawei also plans to develop 1 million AI developers and partners over three years.

In the digital economy, ICT is a basic technology, and AI is considered one of 26 general-purpose technologies (GPT) in history. AI has become an enabler for industries that's driving industry digitalization. ICT's horizontal model and vertical industries require deep collaboration with others.

Huawei held a Global Industry Organizations (GIO) Roundtable in Shanghai with 16 global standards organizations, industry organizations, and open source organizations. They decided to collaborate to jointly promote industry digital transformation and speed up the arrival of the intelligent world.