

Global Industry Vision (GIV): Frequently Asked Questions

About GIV and Its Research Methodology

Q1: What is GIV?

A1: The Global Industry Vision (GIV) is Huawei's vision for the coming intelligent world and the changes this will bring to every person, home, and organization. GIV is also a window into Huawei's exploration and thinking regarding the roles and opportunities for information and communications technology (ICT) in the intelligent world. In the GIV report, Huawei adopts a mix of data and trend analysis to elaborate on global ICT trends and lay out the blueprint for the ICT industry through quantitative analysis as well as qualitative forecasting, all based on extensive research of historical data analysis, econometric forecasting, ICT trends forecasting, and business and industry trend predictions.

In an intelligent world, change will be faster than ever. All things will gain the ability to sense, which will dissolve the boundaries between the physical and digital worlds and produce an endless surge of data. All things will be connected, accelerating the flows of data and making large-scale data analysis and application possible. All things will become intelligent, turning data into new business opportunities. It will drive innovation in applications across all industries, helping them unleash their full potential.

Emerging technologies are driving nonstop change in consumer preferences and business needs. New experiences and business models are popping up all around us, and with them, a whirlwind of opportunities and challenges.

The ICT industry will play a critical role as this transformation occurs. It will assume the responsibility for building infrastructure that will support the coming intelligent world, and then help all industries go intelligent. GIV 2025 aims to set the direction for innovation to make the intelligent world a reality. It is designed to help industry decision-makers determine the path and pace of future growth while acting as a reference to help industries go digital. With this report, Huawei strives to lay the foundations for a fully connected, intelligent world with partners and industries.

Q2: Why did Huawei create GIV 2025?

A2: Digital technology has shaped the global economic landscape, but its impact has just begun to be seen. Over the past decade, the Internet, especially mobile Internet, has driven trends and experiences as consumption has gone digital. From purchase channels to payment processes, digital disruptions and cross-industry impact have become the new norm.

We predict that by 2025, +Intelligence will have a significant impact on the growth of the digital economy. By then, the focus of digital transformation will shift to the supply side. Industries and companies must become actively involved in the development of +Intelligence. In the +Intelligence era, digital technologies like broadband, cloud computing, the Internet of Things (IoT), big data, and artificial intelligence (AI) will become core capabilities. By building these capabilities, enterprises will be able to make their operations, business, and management processes more intelligent, ultimately boosting productivity and driving innovation.

To this end, industries and companies must upgrade the supply side to better meet consumers' increasing demand.

That's why Huawei's first GIV report sets the timeline for data predictions to the year 2025, the starting point of the +Intelligence era and the new starting line for industry upgrades.

Q3: What is unique about GIV 2025?

A3: Organizations around the world adopt different metrics and methodologies when they predict the future of the industry. Huawei has more than 30 years of experience in the ICT domain, and operates in over 170 countries and regions, spanning the cloud, networks, and devices. The GIV 2025 research is based on Huawei's own business expertise and extensive experience in associated domains.

Q4: How does Huawei apply modeling for predictions about metrics in GIV 2025?

A4: Regarding the modeling for predictions about the metrics in GIV 2025, we first collected statistics, including statistics from international organizations, consulting companies, and industry manufacturers, and then built econometric models (e.g., linear regression, polynomial regression, and growth curve regression). If the forecast results obtained from a simple linear regression model were not ideal, then a time series forecast method like the Autoregressive Integrated Moving Average (ARIMA) or a multiple linear regression model was used.

Our quantitative and qualitative forecasting about the future of the industry is also based on the surveys of customers and partners as well as the technology and market insights of Huawei's expert teams in the associated domains.

Q5: How will Huawei continue to deepen its global industry vision?

A5: In terms of the timeline, GIV forecasts the future of the global industry on a five-year basis. The report focuses on the year 2025, and we have begun our research and industry prediction work for the year 2030. Each year we expand the scope of our research, adding metrics and optimizing our predictions based on the latest industry trends to improve the GIV research and propose new forecasts, insights, and perspectives regarding industry trends.

Q6: What role does Huawei play in the development of the ICT industry? What's Huawei's strategy based on its insights into the future of the industry?

A6: The new technological revolution – founded on ICT networks and driven by AI – is leading us into an intelligent world where all things will sense, all things will be connected, and all things will be intelligent. The rules for value creation will be different than anything we have seen before: Data will become an inexhaustible resource; intelligence will decide how the value of data is transformed and delivered; and connections will carry massive quantities of data, and enable exchange of data and smart value creation. Every person, home, and organization will face unprecedented changes in life, business, and society. Along with these changes will come a digital economy valued at US\$2.3 trillion.

Huawei's vision and mission are clear: We will bring digital to every person, home and organization to help build this fully connected, intelligent world. To do this, we will create greater value for our customers, build better platforms for our

partners, provide our employees with more opportunities, and promote the balanced growth of communities where we operate. We will work hard to ensure that the fruits of technological innovation are readily available to all people. We will do our part to promote economic growth that is not only sustainable, but inclusive, and challenge ourselves to generate more substantial value for society. With a focus on ICT infrastructure and intelligent devices, we will build ubiquitous connectivity, create a better experience with broadband, develop open, trusted cloud platforms, and grow an experience-centric device ecosystem. Through this, we will enable digitization and ensure that people, homes, and organizations enter the intelligent world faster.

Q7: What are the trends and scenarios covered in GIV 2025 predictions?

A7: Based on Huawei's qualitative and quantitative forecasting of ICT and its upstream and downstream industries, we found that three trends will combine to drive us to enter the intelligent world:

- (1) All things sensing, more and better connections, bringing everything to the intelligent world
- (2) +Intelligence: Fostering new business species and driving leapfrog development for industries
- (3) Mass innovation: Tapping into the opportunities of a digital economy valued at US\$23 trillion

The impact of this intelligent world will be felt by people, homes, and organizations alike. Industries including public utilities, transportation, manufacturing, healthcare, agriculture, and finance will undergo fast and thorough transformation. GIV 2025 depicts an intelligent world based on scenario-focused research data and industry insights. The following are some of the typical and important scenarios.

1. Scenarios for people

All things sensing and more and better connections will significantly change the way we live. By 2025, 90% of smart devices will have a smart personal assistant. AI health applications in conjunction with smart devices will play a major role. The wide adoption of AI-supported healthcare robots and other smart assistants will enable people to do more than they ever imagined and enable the disabled to live normal lives.

2. Scenarios for homes

The wide application of ICT technology further expands our ability to sense, raising it to a whole new level and driving transformation in the home entertainment and social domains. VR entertainment and live broadcast will bring immersive experience with quality that far exceeds our imagination. When watching a live game, the user will be able to face the player, surrounded by the sound of the field replicated by a dynamic panoramic audio system. Users will be able to do more than enjoy the game in 360 degrees. They will also be able to move freely in the scene, or interact with the player on the pitch.

3. Industry: Logistics

When all things can sense and are connected, digital silos will gradually disappear, and AI will serve society as a general-purpose technology, providing foundational resources that can be shared by all. Logistics will be one of the industries that benefits the most from this, and will apply intelligent transformation most extensively. Delivery personnel, order allocation, quantity of goods, and other elements are no longer an issue thanks to the enablement of +Intelligence. Every logistics company seeks out competitive breakthroughs through technical innovation and personalized services.

4. Industry: Manufacturing

The intelligent world provides opportunities for companies to transform and prosper, whether they are in emerging or traditional industries. +Intelligence will build unique Enterprise Intelligence for every company and fully unlock the value of data for breakthroughs. The traditional manufacturing industry will make use of the Industrial Internet, 5G, cloud, smart robots, 3D printing, and other technologies to build intelligent factories. In these factories, physical equipment operates at the same time as massive amounts of data are transferred. Emerging technology has become a bridge between physical manufacturing and digital manufacturing.

5. Industry: Energy

+Intelligence platforms built upon emerging technology will become the springboards upon which enterprises achieve leapfrog development. Migrating to +Intelligence platforms is a move every enterprise must make in order to survive and thrive. This also applies to the energy industry. Based on the development of IoT, edge computing and cloud, as well as big data smart analytics and other technologies, smart power grids will gain the ability to automatically detect risks and troubleshoot without human intervention. They can forecast power consumption and supply needs of various regions in different time segments, enabling a better, more balanced allocation of energy supply.

More information and assistance:

Please visit <http://www.huawei.com/minisite/giv/en> to download the full GIV 2025 report. You can also click the **Industry Blueprint** page to learn more about industry development potential and get more information about Huawei's predictions of trends and future scenarios.

If you have any questions or suggestions, please feel free to send them to Huawei's GIV Project Team via email: hwgiv@huawei.com.