China Leads in GenAI Adoption, Management

Voice of the World

Edited by GONG Qian

Humanoid robots are exhibited at the 2024 World Artificial Intelligence Conference held in Shanghai, on July 5. (PHOTO: VCG)

China has emerged as the global leader in generative AI (GenAI) adoption, according to the *Generative AI Global Research Report* released by U.S. AI and analytics software company SAS and Coleman Parkes Research in July.

The report, based on a survey of 1,600 decision- makers in industries worldwide, shows that 83 percent of Chinese respondents actively used generative AI in their daily operations. This was higher than the 16 other countries and regions in the survey, including the U.S., where 65 percent of respondents said they had adopted the technology. The global average was 54 percent.

"The results underscore China's rapid progress in the generative AI field," Reuters said.

China is noticeably ahead not only in the practical aspects of orchestrating AI into their existing systems and processes, but also in embedding trust by preparing to adhere to generative AI regulations, the report says.

China released the world's first rules governing generative AI in 2023. Analysts thought it signaled China's support for the fledgling industry, the *Fortune* magazine said.

"Pioneering work in generative AI can give China a competitive advantage in the world, with regards to unlocking value and data," Bryan Harris, chief technology officer at SAS, was quoted as saying by *Fortune*.

"China's more competitive and open market is fostering greater innovation and activity," Enrique Dans, professor of innovation at the IE Business School in Spain, wrote on The Medium.

Machine learning and data science platform Hugging Face's recent ranking of open large language models highlights this trend, with Alibaba's Qwen family of algorithms at the forefront. Other major tech players including ByteDance, Baidu and Tencent have trained their own AI models in Chinese- language data, providing notable advantages in terms of efficiency and suitability within the Chinese context.

The next six to nine months will be a critical period for Chinese AI firms, said Paul Triolo, senior vice president for China and technology policy lead at Albright Stonebridge, and Kendra Schaefer, a partner at the Beijing-based strategic advisory consultancy Trivium China.

Chinese companies' model development is expected to further stabilize, they will likely achieve higher benchmark scores and compare more favorably with global leaders like OpenAI, Google, and Anthropic, according to their co- authored paper published on the website of National Bureau of Asian Research, a U.S. research institution.

They think that the industry in China will see an increasing number of enterprise deployments attempting to solve real- world problems and beginning to show productivity gains.

China is also leading the global race in generative AI patents. According to the *Patent Landscape Report on Generative AI* from the UN World Intellectual Property Organization in July, between 2014-2023, China filed the highest number of generative AI patents. The number of inventions was 38,210, far outpacing the U.S. (6,276), Republic of Korea (4,155), Japan (3,409) and India (1,350).

China has a large unexplored market for both consumers and business industry partners, offering ample opportunities to innovate and introduce generative AI technologies across various applications, using diverse specialized data sets, Wei Sun, senior consultant of artificial research at Counterpoint Research, told CNBC.

"That's the key for China to win, to really have the real-world application deployments that might surpass the U.S. in this area," Wei said.

Generative AI for Videos: Supportive or Disruptive?

Comment

By GONG Qian

The rapid evolution of generative AI, especially its increasing capability to generate text-to-image and image-to-video, has ushered in a transformative era for video making. It is redefining the industry by changing the way stories are told and visualized. But is the emerging technology supportive or disruptive for video creators? Industry experts say opportunities and challenges go hand in hand.

AI models can enhance the efficiency and reduce costs for making videos. "AI is my assistant," British filmmaker Arthur Jones told *Science and Technology Daily (S&T Daily)*. So did Liang Bibo, a documentary director and a professor of the Communication University of Zhejiang in east China. Before they shoot, they need to research and the AI models can provide them comprehensive and accurate information in an orderly format.

Bringing costs down by using AI models is a crucial factor. Traditionally, historical scenes are presented in films and television programs through performances or animations, which are costly and time- consuming. Professor Liang once had to spend over a year to do some animation historical scenes for a documentary, which cost millions of RMB. Had he used AI tools, both money and time could have been significantly saved.

Of course, AI is indeed very helpful to portray history. In July, China Media Group produced a 15- minute micro film about four Chinese athletes applying to attend the Paris Olympic Games in 1924. In collaboration with Chinese tech company Kuaishou, it used the video generation model, transforming historical photos into video clips to reproduce real historical scenes of that time with authenticity.

Hollywood studios have also embraced generative AI. Facing pressure to reduce costs, postproduction companies are working with generative AI companies, Yves Bergquist, director of the AI & Neuroscience in Media Project at University of Southern California's Entertainment Technology Center, told MIT Sloan Management Review.

AI models can also lower the threshold of video creation for ordinary people. Generally speaking, filmmaking and TV production require significant investment in scripts, professional equipment, actors and acting sets. But now, the AI models can provide the script and generate corresponding images or video material. "AI can turn your imagination into reality without getting out of home," Li Yang, senior director of Kuaishou, who is in charge of developing Al models, told *S&T Daily*.

But to get the best result, both amateurs and professionals need to repeatedly adjust the prompt to make the AI models fully understand what they want. "This is a human-machine interaction process," Li added.

Professor Liang once had to adjust the prompt several times to get the AI models to produce the film frame he wanted.

However, there is a concern in Hollywood that the revolutionary generative AI could potentially take over the roles of scriptwriters, visual effect artists, composers, and other key personnel.

In 2023, the U.S. SAG- AFTRA and the WGA (Writers Guild of America), two labor unions representing media professionals, went to strike, hitting Hollywood and the television industry hard. According to The Wrap, California's economy estimatedly lost three billion USD due to the months- long strike. Eventually, the two unions and the AMPTP, a trade association representing American television and film production companies, reached a deal. One key part of it was protecting artists and writers from AI technology.

Meanwhile, from the perspective of the current development of AI technology, it falls short of higher demands, such as lacking detailed representation of images and videos, Professor Liang said.

Though stakeholders have very different approaches to the generative technology, the fact is that it is already here and is making big changes. But it should be noted that high-quality video content will always be scarce and in demand, and the talented creators matter much more than ever. Renowned filmmaker James Cameron said AI cannot reflect on art and understand it the same way a creative human artist can.

The future of the film industry lies in finding the right integration and subtle balance between human artistry and technological capabilities.

Vimi, a large model for controllable character video generation, is presented at the 2024 World Artificial Intelligence Conference held in Shanghai on July 5. (PHOTO: VCG)

Hydropower Improves Cambodia's Energy Landscape

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"Now, electricity is cheap and convenient, and our life is getting better and better. We are really thankful for Huadian [Corp]," said Wu Xitian, a Cambodian translator for the China Huadian Lower Stung Russei Chrum Hydro- Electric Project (Cambodia) Co., Ltd. who lives in Koh Kong.

In the past decade, the lower Stung Russei Chrum hydropower station has operated safely for more than 3,900 days since it was put into operation. In this time, the cumulative output of green energy has reached 11 billion KWH, and the power generation in the following year of operation accounts for 30 percent of the national power generation in Cambodia.

The hydropower station has played a crucial role in ensuring energy supply for major events, including the Cambodian New Year and other significant celebrations. Additionally, the company has committed to upskilling local employees. Currently, Cambodian workers make up more than 50 percent of the project workforce, with many holding technical and management positions.

Opinion

Fostering Integration: Sinology in Latin America

By LIN Yuchen

The first Congress of Latin American Sinologists, held in Argentina in July, marked the growing interest in Chinese studies across the region.

Over 50 Latin American and Chinese scholars gathered to discuss cultural integration and open development with a focus on the development of sinology in Latin America and regional cooperation. The conference highlighted the increasing curiosity about China and its rapid development, driven by the closer ties between China and Latin American countries.

Increasing attention on sinology and Chinese studies

The congress, organized under the framework of the World Sinologists Conference and guided by the Center for Language Education and Cooperation of the Chinese Ministry of Education, was co-hosted by Beijing Language and Culture University (BLCU)'s World Sinology Center and several Argentine universities. Discussions centered around Chinese language teaching in Spanish- speaking regions, the Belt and Road Initiative, and Sino- Latin American cultural dialogues.

China's ambassador to Argentina, Wang Wei, emphasized the conference's role in elevating cultural exchanges between China and Latin America to a new level.

Xu Baofeng, director of the Belt and Road Research Institute at BLCU, noted the enthusiastic participation of scholars from over 20 Latin American countries.

Xu said this enthusiasm reflected a broader trend: Latin America has become a fertile ground for the growth of sinology and Chinese studies. The development has expanded beyond academia to include cultural exchanges and economic cooperation, indicating a profound and multifaceted interest in understanding China.

Role of Chinese traditional thought

An essential aspect of this burgeoning interest is the influence of Chinese traditional thought, such as dialecticism and the doctrine of the mean.

These philosophical concepts offer valuable perspectives for interpreting China's development model and its approach to global cooperation.

Dialectical thinking, which emphasizes the interplay of opposites and the dynamic nature of change, aligns well with China's strategies for economic and social development. The doctrine of the mean, advocating balance and moderation, can provide insights into China's diplomatic strategies and its efforts to maintain stability while pursuing growth.

Sinologists' expanding horizons

The rapid development of Chinese studies in Latin America is underscored by the research at the Institute of Latin American Studies, Chinese Academy of Social Sciences.

This research indicates a surge in institutions and scholars dedicated to China studies, with a new generation of researchers diversifying their focus and methodologies. The creation of networks for Chinese studies further exemplifies this trend, fostering a collaborative environment for academic and cultural exchanges.

Ana Gabriela Fernández, director of the Uruguayan branch of the Latin American Social Sciences Institute, remarked on the increasing attention given to Sinology, calling the congress a testament to this growth.

Norberto Consani, a scholar from Argentina's National University of La Plata, reminisced about the early days of Chinese studies in the region, contrasting it with the current widespread interest and significant advancements in both the quality and quantity of research.

Broader implications for Sino-Latin American ties

The conference also addressed the broader implications of Chinese studies for Sino-Latin American relations.

Zhou Zhiwei, deputy director of the International Relations Office at the Institute of Latin American Studies, highlighted three key areas of focus for Latin American scholars: China's modernization experience, its foreign policy and global governance perspectives, and its cultural foundations.

These areas offer valuable insights into how Latin American countries can learn from China's development strategies and leverage these lessons for their own growth.

The establishment of the Latin American Sinologists Council, announced during the conference, aims to enhance communication and collaboration among scholars in the region.

This council will facilitate deeper academic exchanges and support the growth of Sinology and Chinese studies in Latin America. Additionally, initiatives such as establishing a Sinology research center and a master's program in China policy studies in Argentina further demonstrate the commitment to fostering a comprehensive understanding of China.

Hi! Tech

New Chinese Text-to-Video AI Model Launched

By CEN Yingjie

Vidu, a large video-generating model developed by Chinese AI company Shengshu Technology and Tsinghua University, is now available for global use. The model was first unveiled in April at the 2024 Zhongguancun Forum in Beijing.

According to Zhu Jun, vice dean of the Institute for Artificial Intelligence at Tsinghua University and chief scientist of Shengshu, Vidu is the first China-developed text- to- video large AI model with extended duration, exceptional consistency and dynamic capabilities. It can generate videos up to 32 seconds long with a single click.

Unlike other models currently available in the domestic market, Vidu is not limited to a common realistic style. It provides users with customized character images and generates videos in a gorgeous anime style, offering much more creative freedom. Compared to Sora, another text-to-video AI model previously launched by OpenAI, Vidu does not require an application, and users can get started by registering directly with their email address.

Despite these impressive feats, there is still room for Vidu to improve. According to user feedback, this large AI model understands and fulfills most requirements but occasionally fails to respond adequately to prompts.

However, it has a promising future. "After video generation, Vidu will focus on generating audio," Zhu added. AI models like Vidu are poised to propel the already booming AI market to new heights.