## CHINA'S RESEARCH AND DEVELOPMENT IN ARTIFICIAL INTELLIGENCE

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## **Executive Summary**

- 1. The rise of ChatGPT has intensified the competition between China and the United States in artificial intelligence (AI).
- 2. In terms of the total number of AI research papers and patent applications, China is the world's number one. In terms of paper citations and patent approvals, China ranks amongst the top three in the world.
- 3. Although China ranks second in the most cutting-edge and innovative AI research, there is still a significant gap between China and the United States, which ranks first.
- 4. China is strong in the application of AI, developing many successful consumer products, but is relatively weak in basic research.
- 5. China has its own advantages in developing AI, including support from the national development plan, higher education institutions, access to big data from the internet economy and rich AI product application scenarios.
- 6. However, there are also a series of challenges, such as a shortage of talent, especially top-tier talent, a lack of high-quality Chinese language text data for training ChatGPT-like models and restrictions on computing power due to the US chip ban.
- 7. The Chinese government has recently reformed the scientific and technological management institutions to strengthen the state-led research system. This system may help China catch up rapidly in AI with the mobilisation of resources. However, whether this system can bring about a breakthrough similar to that of the ChatGPT is a topic that requires further discussion.