

MORGAN CREEK

CAPITAL MANAGEMENT

ALTERNATIVE THINKING ABOUT INVESTMENTS

New Asia Perspectives



Welcome to Morgan Creek's *New Asia Perspectives*, an open forum where we share our proprietary research together with curated articles of interest. We seek to offer a variant interpretation of important political and economic events through an Asian lens by leveraging our team's "on the ground" insights and decades-long experience in covering the region. We disseminate our research through newsletters, webinars and periodic whitepapers. Feel free to forward our research to colleagues you think might be interested and please share any interesting research you come across as well. To offer comments, share research, or learn more about our team and investment offerings, please email chinateam@morgancreekc.com.

Best Regards,

A handwritten signature in black ink that reads "Mark W. Yusko".

Mark W. Yusko
CEO & CIO

NOTES FROM THE BUND¹

"We have to find ways to cooperate, be respectful of them, while also acknowledging that we have different set of values."

---Mustafa Suleyman, CEO of Microsoft AI
discussing the U.S.-China relationship on AI technology²

As of the first quarter of 2024, nearly 30,000 AI companies operate globally, with the US accounting for 34% and China for 15% of the total. Among these, 1,328 are LLMs companies, with the US making up 44% and China 36%. Together, these two countries dominate the global AI landscape, representing roughly 50% of the total AI companies and 80% of the LLM sector.³ Despite their dominance, the two largest economies have been holding adversarial views against each other since 2018, especially regarding AI competition. In this piece, we will share our views on the future trajectory of the global AI competitive landscape, with a particular focus on China and the US. Our perspective aligns with Mr. Suleyman's. Further, we envision the endgame as coexistence with each country developing its own set of AI systems, with distinct models and applications. We will revisit the equation we previously discussed to help better illustrate.

$$\text{Commercialization} = (\text{Algorithm} + \text{Compute} + \text{Data}) \times \text{User Case}$$

Figure 1: Commercialization equation for AI⁴

Algorithm – Fundamental factor but with minimal differences

Algorithms are fundamental in determining how effectively a model learns, performs, and generalizes. Neural networks are the backbone of modern AI, with architectures like Transformers for language processing and CNNs⁵ for image processing being essential to today’s LLMs. While there are variations in adaptations of these architectures, core principles remain the same. The US is a leader in groundbreaking R&D, while China excels at rapidly implementing and iterating these concepts, leveraging the benefits of the open-source ecosystem.

Compute – Crucial yet both are limited by its shortest stave

It's tempting to attribute differences in AI development only on this factor, especially given that this is the core battlefield between two superpowers. However, our belief suggests a broader view. It is important to remember that ‘hardware’ and ‘resources’ are almost equally important in developing effective AI models.⁶ Each country exhibits its own strengths and limitations. The US clearly leads in chip technology, with companies like Nvidia being major global GPU suppliers. Yet, concerns have been raised by the nation’s tech elites about potential electricity shortages affecting the sector. In contrast, China excels in infrastructure development, boasting global-leading 5G technology and a robust electricity grid supported by renewable energy initiatives. While on the flip side of the coin, the country is making substantial efforts trying to close the gap in advanced-node chip development.

Data – Key determinant shaping distinct AI systems for each country

Data is the foundation for learning and predicting, making it crucial for developing effective AI models. While traits like accuracy, completeness, and consistency are commonly used to assess data quality, we want to highlight another important factor—language, which is strongly influenced by regional cultures and usage habits. To illustrate this, consider the example of memes. Memes often evolve quickly with trending topics, frequently changing the original meanings of words and phrases. We would like to present a simple yet intriguing experiment. Let's see how AI models from the US and China interpret a meme. We will first reveal the correct answer: in Chinese, the phrase “Ah yes yes yes” often means “Whatever”⁷ today.



In Chinese internet slang, "A duì duì duì" is typically used with a sarcastic or negative connotation, expressing disagreement, impatience, or disdain towards someone or something. This phrase often appears when the other party's words or actions seem absurd or illogical. However, depending on the context, the exact meaning of "A duì duì duì" may vary, and it can sometimes be used as a helpless or perfunctory response.

"Ah, yes, yes, yes" typically indicates affirmation or agreement. It is a colloquial expression that emphasizes recognition of a viewpoint or information. If you want to express denial, you can use "Ah, no, no, no" or simply say "No, that's not it."

Figure 2: A test on how the models interpret a locally trending meme⁸

Data teaches machines to understand context and is therefore the most relevant factor for user cases. At the end of the day, data teaches models, models serve people, and people use language to express instructions. English (1.3 billion speakers) and Mandarin Chinese (1.1 billion speakers) are the two most commonly spoken languages, leading the third by almost double.⁹ Both are too significant to neglect, but also too dynamic to fully understand each other. One of the key impacts is on tokenization.¹⁰ Tokenization, a key step in data processing, diverges notably between word-based languages like English and character-based languages like Chinese. Therefore, they have very different tokenization algorithms which are not compatible with each other. For example, English tokenization benefits from clear word boundaries defined by spaces and punctuation. In contrast, Chinese lacks explicit word delimiters, leading to a statistical and rule-based method to segment text effectively into meaningful units. With increasing isolation between the US and China, it becomes harder for each country to access data in the other language, thus making it more challenging to respond to diverse linguistic contexts.

User Case – Divergent perspectives driving varied application evolution

From a macroeconomic perspective, the US and China have different drivers for growth. The US thrives on a service-based economy with a focus on high-tech, finance, and consumption, supported by advanced digitalization. In contrast, China prioritizes manufacturing, with some sectors lagging in basic digital capabilities¹¹, relatively speaking. Consequently, the client profiles and demands for AI services in the two countries differ significantly.

We are in fact observing a divergence of business models between the US and China reflecting this difference. In **the US**, MaaS (Model-as-a-Service) models, supported by APIs¹², are a common monetization strategy. These models enable clients to access and integrate features or data from other services, with pricing often based on pay-per-use or subscription. This approach thrives in a highly digitalized market, where customers are well-versed in data metrics and have a clear understanding and expectations for inputs and outputs. As a result, standardized protocols and pricing structures, two key features of APIs, are more easily embraced by clients. In contrast, **China** favors end-to-end models. These models offer a one-stop solution, handling everything from raw data processing, to model development, and to final delivery within specific verticals. Pricing is usually project-based, offering a more tailored and cost-effective solution for clients who lack a clear understanding of data. Interestingly, a similar divergence in business models is also evident in the SaaS industry across the two countries, further reflecting this rationale.

Among the four factors mentioned above, the first two can be categorized as endogenous factors. Although both countries are now addressing challenges and strengthening capabilities independently, we believe that in a more ideal scenario, cooperation and collaboration could benefit both. While the last two factors are exogenous, with each country pursuing its own development strategy, our understanding is that there is no absolute right or wrong approach, nor any inherent superiority or inferiority. Each country is leveraging its strengths in a manner that is reasonable and effective within its own context.

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ASIA NEWS SPOTLIGHT

Keppel Capital Achieves First Closing of \$400.4 mil for Alpha Asia Macro Trends Fund IV: The fund is expected to have assets under management (AUM) of up to US\$2.5 billion when fully leveraged and invested. Launched in 2007, AAMTF IV is the fourth value-

add pan-Asian fund in Alpha's flagship Alpha Asia Macro Trends series. The fund seeks to invest in multi-asset classes across key gateway cities in the Asia Pacific region including Singapore, Beijing, Tokyo, Seoul and Melbourne. [Read More.](#)

'Black Myth' Elates Fans and Becomes One of China's Most Successful Games: "Black Myth" was released globally on Tuesday and enjoyed one of the best opening days, as measured by the number of players on gaming platform Steam, and sold nearly 1.2 million pre-release copies. Gamer Li Song told AFP at a video shop in Beijing he bought it as soon as it was available for pre-order. "It feels good," the 41-year-old said as his character scampered around a lush forest, dodging attacks from furry beasts before transforming into an insect. [Read More.](#)

Australia Greenlights \$19bn Solar Project to Export Power to Singapore: Australia has granted environmental approval for a \$19bn solar power project to export electricity to Singapore. The Australia-Asia Power Link is slated to generate 6GW of renewable energy, one-third of which would be transmitted to the Southeast Asia city-state via an undersea cable. SunCable, owned by billionaire software entrepreneur and climate activist Mike Cannon-Brookes, has said the project will supply up to 15 percent of Singapore's energy needs once completed in the early 2030s. [Read More.](#)

China Slams Brakes on Coal Power Plants as Clean Energy Gains Momentum for Net-zero Target: China put a brake on approvals for coal-fired power plants in the first half of this year as the development of renewable energy gained momentum, according to a new report. More can be done to roll back previously approved facilities, it said. The government permitted only 9 gigawatts (GW) of new capacity, 83 per cent lower than a year earlier, the Centre for Research on Energy and Clean Air (CREA) and Global Energy Monitor (GEM) said in a report on Thursday. Proposals for building new and reviving older plants also saw a 38 per cent decline to 37GW, it added. [Read More.](#)

¹The Bund is a historic waterfront area in central Shanghai, where Morgan Creek's office is located. From the 1860s to the 1930s, it was the rich and powerful center of the foreign establishment in Shanghai, operating as a legally protected treaty port. The picture above is part of the historical waterfront.

²Source: CEO of Microsoft AI speaks about the future of artificial intelligence at Aspen Ideas Festival, www.youtube.com/, Jun 24, 2024

³Source: White Paper on Global Digital Economy (2024), China Academy of Information and Communications Technology, Jun 21, 2024

⁴Note: This equation is for illustrative purpose only.

⁵CNNs stands for Convolutional Neural Networks (CNNs). It is a type of deep learning algorithm particularly effective for image classification, object detection, and segmentation tasks.

⁶Note: In the second piece of this series, we have outlined that hardware and resources account for up to 50% and 40% of the total model cost, respectively.

⁷Note: During a livestream of a CSGO match, a host dismissed his teammate's insults with a sarcastic "Ah, yes, yes, yes." This phrase quickly gained popularity as a way to express dismissive attitude towards another person's negative remarks or provocations.

⁸Note: The translation is also presented by each model.

⁹Source: What Is the Most Spoken Language in the World, <https://gurmentor.com/>

¹⁰Note: Tokenization is the process of breaking down text into smaller units, called tokens. This is a crucial step because it converts raw text into a format that can be processed by machine learning models.

¹¹Source: World Digital Competitiveness Ranking 2023, <https://www.imd.org/>, 2023

¹²Note: API stands for Application Programming Interface. It defines the structure, operations, and communication methods that allow different software components to interact with each other.

Important Disclosures

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Morgan Creek Capital Management | 301 W. Barbee Chapel Road Suite 200 | Chapel Hill,
NC 27517 US

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