

Deciphering the challenges of
selecting data center sites for
overseas expansion by Chinese
enterprises

9 September 2024

Deciphering the challenges of selecting data center sites for overseas expansion by Chinese enterprises

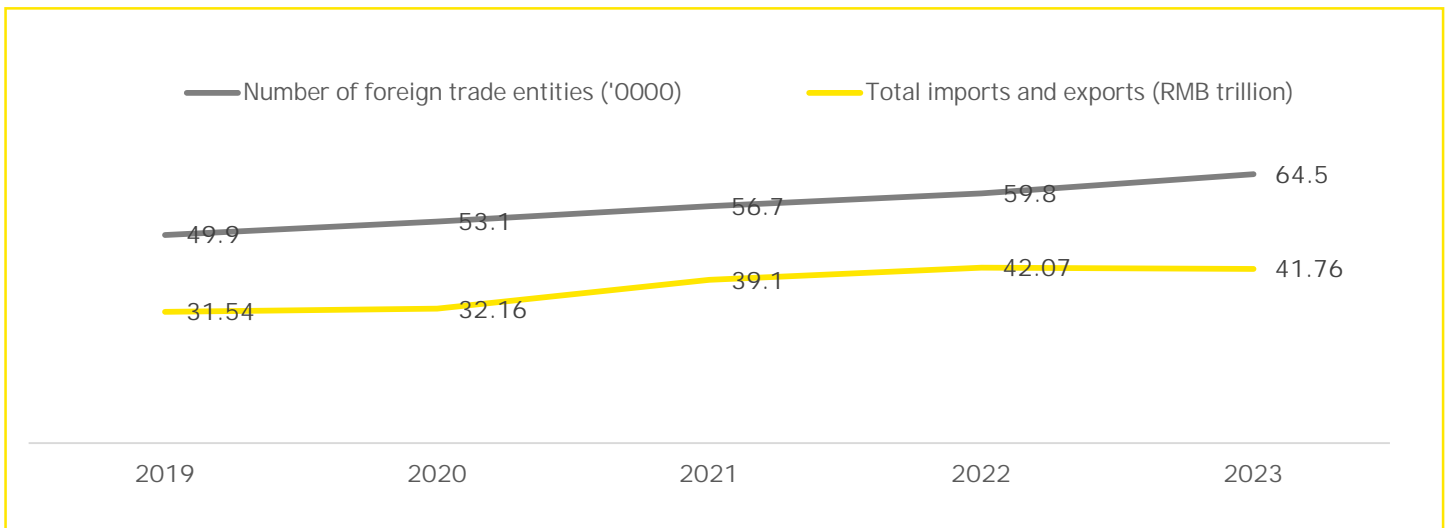
2024-9-9



The surge of Chinese enterprises venturing abroad

Going overseas has now emerged as a significant focus for the advancement of Chinese enterprises. With the enhancement of high-quality cooperation under the Belt and Road Initiative, the international expansion of Chinese enterprises is poised to play a crucial role in aligning the global economy, national strategies and corporate development strategies in the future.

According to the data of General Administration of Customs, in 2023, the number of Chinese foreign trade entities with import and export records surpassed 600,000 for the first time, reaching a total of 645,000. An increasing number of enterprises are directing their attention towards international markets and developing going overseas strategy for new development.



Data from iiMedia Research¹ indicates that 29.5% of large enterprises have already expanded internationally and 19.9% of them intended to do so. Among the total enterprises going overseas, medium-sized, small-sized and micro enterprises account for 39.4%, 17.5% and 13.6% respectively. Furthermore, the target markets for Chinese enterprises going abroad have progressively shifted from traditional, established markets such as Europe, the US and Southeast Asia to emerging economies, including the Middle East and Africa.

Factors encouraging enterprises to go overseas

- ▶ External: A multifaceted and varied suite of policy measures to support enterprise's international expansion

In recent years, various governmental bodies, including the State Council, the General Administration of Customs, the Ministry of Commerce and the People's Bank of China, have implemented favorable policies related to finance, infrastructure, logistics and customs clearance facilitation to promote the internationalization of domestic enterprises. In April 2023, the General Office of the State Council released the Opinions on Stabilizing the Scale and Optimizing the Structure of Foreign Trade², which emphasizes the need to enhance trade promotion to broaden market access, accelerate innovation and development in foreign trade and improve the overall environment for foreign trade activities.

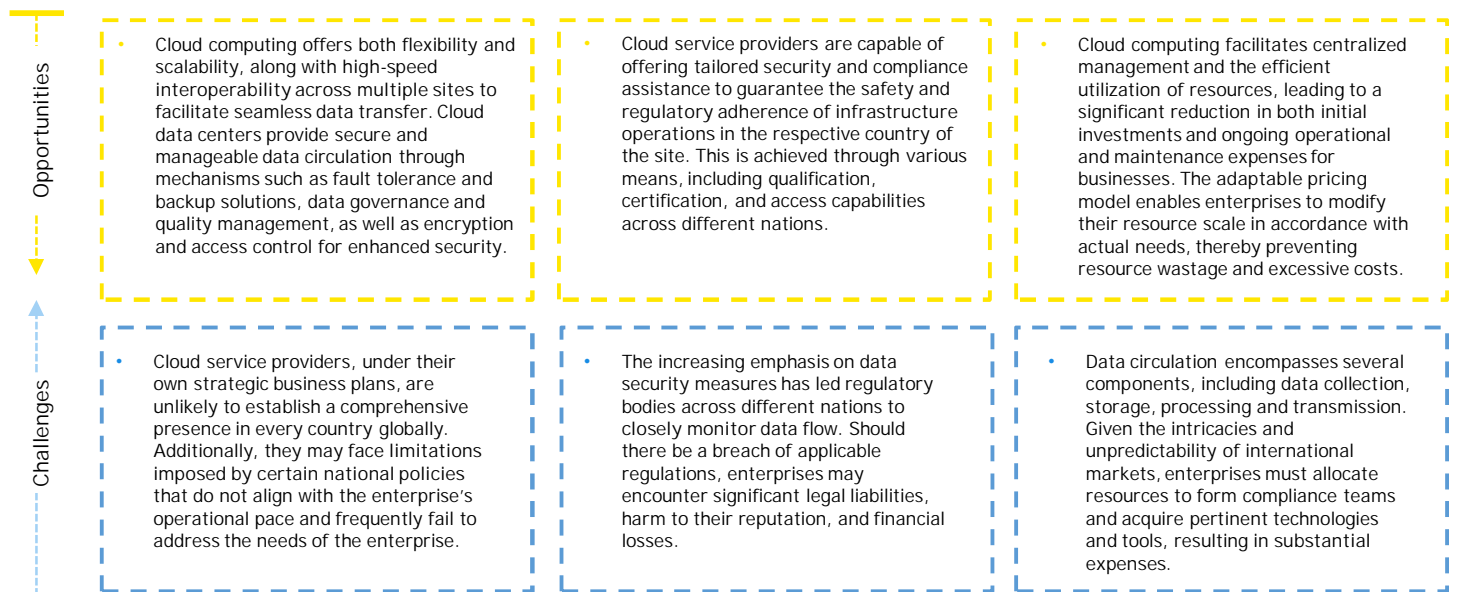
- ▶ Internal: Enterprises are increasingly seeking opportunities in international markets to drive new growth momentum

Since the initiation of reform and opening up, Chinese enterprises have made significant advancements in both technical capabilities and management practices. Export products have evolved from the traditional old three categories (clothing, home appliances and furniture) to the contemporary new three (electric vehicles, lithium batteries and photovoltaic products). As China's manufacturing sector continues to advance towards high-end and intelligent production, expanding into international markets offers enterprises new avenues for growth, increased profitability and enhanced business prospects. This expansion also aids in optimizing the allocation of production resources, thereby strengthening the stability and sustainability of these enterprises.

The significance of selecting data centers for Chinese enterprises going overseas

Amid the acceleration of digital transformation, many enterprises are relocating their research and development centers, production facilities and other essential operations abroad. The value of data, as a fundamental asset for business operations, is increasingly recognized for its role in circulation and utilization. Concurrently, there has been a global uptick in legislation and regulation on data processing and cross-border data flows. Data has become one of the important chips in international commerce and trade, together with products, people and capital.

The high-speed development of cloud computing presents both opportunities and challenges for enterprises' global expansion



Under the new circumstances, enterprises must undertake a more holistic approach to their digital strategies. This includes considerations related to infrastructure design, security for terminal access, integration and sharing of applications and services, as well as compliance with cross-border data regulations and protection of intellectual property. Among these factors, the selection of data center locations stands out as a fundamental and critical task, primarily reflected in:

1 Management of operational expenses:

The costs associated with IT construction and operation are influenced by the energy, land and labor conditions prevalent in various countries. Consequently, the geographical placement of data centers can result in cost variations exceeding 40%.

2 Experience of the product performance:

The physical distance between locations can lead to delays in data storage and transmission. Specifically, there is an approximate 5 milliseconds delay for every additional 1,000 kilometers, along with a corresponding rise in the packet loss rate.

3 Risks associated with data compliance:

Regulatory and punitive measures concerning data flow differ significantly across countries. For instance, under the General Data Protection Regulation (GDPR) in the EU, violations of data transfer regulations can incur fines exceeding €20 million.

Practical approaches for compliant data center location selection

The EY team has developed a comprehensive suite of global data center location solutions tailored to meet client requirements. Currently, it has delivered analytical insights and reference reports for various automotive and manufacturing enterprises. The primary steps involved are as follows:

1 Business and international market analysis

- ▶ Gathering the most recent demands regarding privacy, security and cross-border data transmission, while utilizing the list of target overseas markets and market share data supplied by the client.
- ▶ Gaining an understanding of the client's business contexts and evaluating the acceptable standards for network latency within those contexts.

2 Cloud service provider evaluation

- ▶ Conducting an analysis of the customer's cloud service provider to determine if its capabilities for global support align with the customer's business structure.
- ▶ Exploring alternative vendors in the market. Performing a thorough comparison of the service offerings and technical capabilities of each vendor to ascertain their suitability for the business requirements.

3 Model assessment

- ▶ Gathering global site data from cloud service providers and establishing pricing factors.
- ▶ Utilizing the collected data, our algorithm will evaluate the performance, compliance and pricing strategies of each vendor's available data sites for assessment.
- ▶ Generating potential solutions along with their respective pricing tiers.

4 Final selection

- ▶ Leveraging the preliminary options identified in step 3 and the overall business architecture, strategic planning and risk tolerance, enterprise will confirm the final selection of data center location.

While a standard approach exists, variations in strategy, product and culture are evident among businesses going overseas. Therefore, enterprises must consider the below points, while seeking the best strategy that balanced its cost, performance and compliance:

1 Geopolitical issues:

Geopolitical issues may impose challenge on data transfers and equipment procurement and affect the dynamics between the enterprise and the host country of the data center.

2 Cross-border data backhaul:

Although the data center located overseas, there remains a potential risk when operation and maintenance team access the cross-border data domestically. Enterprises must assess the specific risks involved and the expenses associated with local operations and maintenance teams.

3 Cloud vendor services:

The range of services provided by cloud vendors can differ significantly from one location to another.

Additionally, a single cloud provider may face risks such as technical failures, data loss, service interruptions or even the possibility of exiting the market.

For more information, please contact us:



Kelvin Gao

Managing Partner, Cybersecurity and Privacy Advisory Services
Ernst & Young (China) Advisory Limited
kelvin.gao@cn.ey.com



Yang Zhou

Partner, Cybersecurity and Privacy Advisory Services
Ernst & Young (China) Advisory Limited
yang.zhou@cn.ey.com

1. *White Paper on Chinese Companies Going Overseas 2023-2024* [EB/OL]. iiMedia Research, <https://report.iimedia.cn/repo10/43420.html?acPlatCode=IIMReport&acFrom=bottomDownloadBtn&iimediald=95587>

2. *The Opinions on Stabilizing the Scale and Optimizing the Structure of Foreign Trade* [EB/OL]. (2023-04-25) [2024-02-21]. The General Office of the State Council, https://www.gov.cn/zhengce/content/2023-04/25/content_5753130.htm

EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

EY embraces innovation and adopts advanced technologies, helping clients identify market trends, capture opportunities and accelerate business transformation through integrated high-quality services.

Working across assurance, consulting, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients, nor does it own or control any member firm or act as the headquarters of any member firm. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

© 2024 Ernst & Young, China.
All Rights Reserved.

APAC no. 03021114
ED None.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

ey.com/china

Follow us on WeChat
Scan the QR code and stay up-to-date with
the latest EY news.

