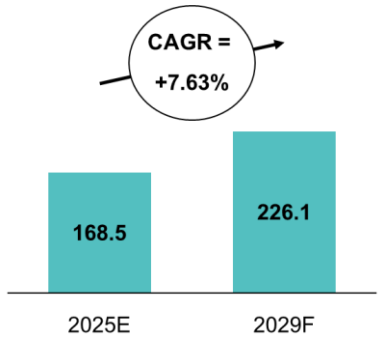
Business Overview

- **The data center business is crucial infrastructure for conducting business in the digital age. It plays a role in storing data efficiently and effectively.** Data centers offer high security and are designed to support continuous business operations and the expansion of users in various digital fields. These include smartphones, online purchases, digital payments, and social media, which are all experiencing rapid growth. Data centers provide a range of services, including: 1) Enterprise DC, which is created specifically for companies or organizations; 2) Co-location and space rental services; and 3) Public cloud services that organizations and individuals can purchase for data storage.

- **The pandemic has accelerated enterprise digitalization across the Asia-Pacific region, resulting in a substantial increase in demand for artificial intelligence (AI) technologies, enhanced data security, and cloud services by organizations.** This creates significant opportunities for the data center industry, as organizational digital transformation has fueled a surge in demand for scalable and cost-efficient IT infrastructure. This has led to rapid expansion of data centers throughout APAC, particularly with the adoption of edge computing technologies. The growing emphasis on AI, machine learning, and hybrid cloud approaches is also driving substantial investment in advanced data center infrastructure across the region. **Statista Market Insights forecasts that the APAC data center market will generate revenues of USD 168.5 billion in 2025,** with the sector anticipated to expand at a compound annual growth rate (CAGR) of 7.63% between 2025 and 2029, reaching a market size of USD 226.1 billion by 2029.

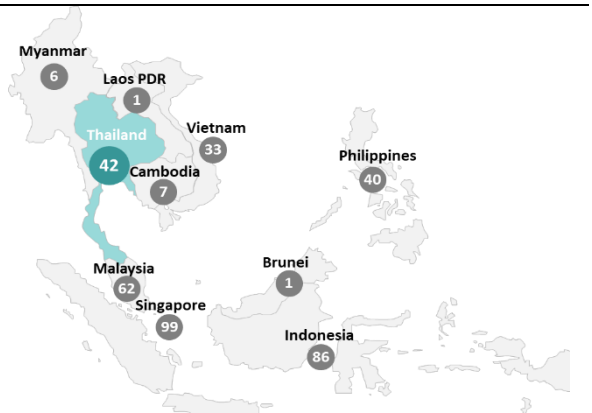
- **According to data from Cloudscene, as of April 2025, China has the largest number of data centers in the APAC region, with 449 data centers.** Australia and Japan are following with 314 and 222 data centers, respectively. In the Southeast Asia region, Singapore leads with 99 data centers, followed by Indonesia with 86 data centers and Malaysia with 62 data centers. Thailand's data center has a total of 42 data centers, positioning it the fourth-largest hub in the region. Of these, 37 are located in Bangkok and the surrounding areas.

Figure 1 APAC's Revenue in Data Centers Business, 2025-2029, USD bn



Source: LH Bank Business Research Analysis based on data from Statista Market Insights

Figure 2 Data Centers in Thailand and ASEAN countries (as of April 2025)

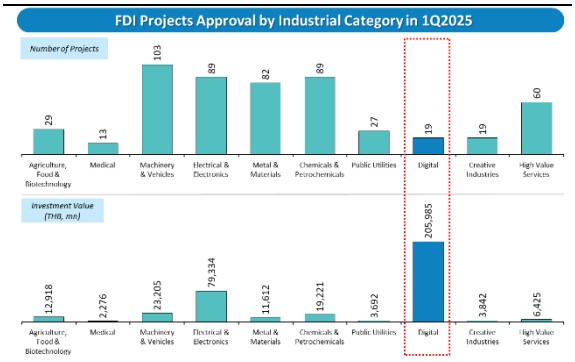


Source: LH Bank Business Research Analysis based on data from Cloudscene.com and Statista

Data Center Business Situation in Thailand

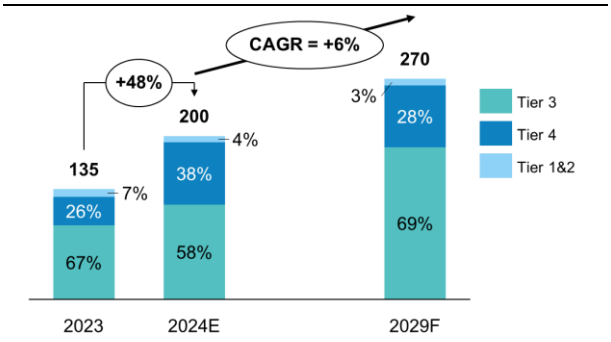
- **Thailand is among a select group of ASEAN countries in which large data center companies are interested in investing.** The following factors have contributed to this interest: 1) Thailand's high level of internet access.; 2) Readiness of country's public utilities, electricity, water systems, submarine cables, and etc.; 3) There is ample space available at reasonable prices.; 4) The country's location is a strategic location in the Southeast Asia region; and 5) Thailand's digital economy offers substantial opportunities for expansion. Key factors contributing to this growth include the increasing number of 5G internet users, the growth in the e-commerce market, the growing demand for digitalization in both public and private sectors, and government support and initiatives, such as Thailand 4.0 policy, the development in the Eastern Economic Corridor of Digital (EECd), and BOI incentives.
- **According to the Board of Investment (BOI), the digital industry had 19 foreign projects approved in the first quarter of 2025 and the approved investment value exceeded THB 205,985 million, accounting for over 56% of the total approved investment value in that quarter.** This included several large-scale investment projects with investment values of THB 1,000 million or over, such as 1 Data Hosting business investment project (valued at THB 126,793 million) and 3 Data Center business investment projects (with a combined value of THB 79,001 million).

Figure 3 Foreign Direct Investment Value in Thailand, 1Q25



Source: LH Bank Business Research Analysis based on data from Board of Investment (BOI)

Figure 4 Data Center Segmentation in Thailand (MW)



Source: LH Bank Business Research Analysis based on data from Mordor Intelligence

- **The data centers in Thailand have seen significant development, with over 90% now supporting large corporate customers. These facilities have been constructed to adhere to the highest standard, specifically Tier 3 and Tier 4 standards.** Key data center operators in Thailand include National Telecom Public Company Limited (NT), CSL Public Company Limited (formerly known as CS Loxinfo and acquired by AIS in 2018), True Internet Data Center Co., Ltd., ST Telemedia Global Data Centres (Thailand) Co., Ltd., Internet Thailand Public Company Limited, NTT (Thailand) Public Company Limited, JasTel Network Company Limited, PROEN Corp Public Company Limited, Supernap (Thailand) Co., Ltd., and AIMS Data Centre (Thailand) Co., Ltd.

- **Furthermore, several local and global tech companies have interested in or have already made investments in data center business in Thailand.** These firms include GSA Data Center Company Limited (GSA) (The joint venture between GULF, Singtel, and AIS), Digital Edge B.Grimm (TH) Holding Pte. Ltd (The joint venture between BGRIM and Digital Edge (Singapore) Holdings Pte Ltd.), Vistas Technology Co., Ltd., GDS (Thailand) Company Limited, Equinix (Thailand) Limited, NextDC Holding (Thailand) Co., Ltd., CtrlS Datacentres (Thailand) Limited, Evolution DC (Thailand) Co., Ltd., Alibaba Cloud (Thailand) Co., Ltd., Huawei Technologies (Thailand) Co., Ltd., TELEHOUSE (Thailand) Ltd., Siam AI Corporation Co., Ltd., Galaxy Peak Data Center Co., Ltd., Bridge Data Centres (Thailand) Co., Ltd., OneAsia Data Center (Thailand) Company Limited, Supernap (Thailand) Co., Ltd., Microsoft (Thailand) Ltd., Amazon Web Services (Thailand) Limited, Quartz Computing Co., Ltd. (Google's subsidiaries), and TikTok's subsidiaries.
- **Data centers in Thailand are primarily located in Bangkok and its metropolitan area. However, there are also significant facilities located in key provinces and industrial zones across the country**. This includes Nonthaburi, Pathum Thani, Samut Prakan, Saraburi, Chiang Mai, Khon Kaen, Phuket, Surat Thani, Songkhla, and EEC provinces (Chonburi, Rayong, and Chachoengsao), due to robust infrastructure, reliable power, and proximity to submarine cable landing stations.

Table 1 Major Data Center Operators in Thailand

Company	Country	Numbers of Data Center
National Telecom (NT)	Thailand	13
CSL (CS Loxinfo / AIS)	Thailand	9
True Internet Data Center (True IDC)	Thailand	4
STT GDC	Singapore	3
Internet Thailand (INET)	Thailand	3
NTT (Thailand)	Thailand	2
Supernap	United States	1
Jastel Network	Thailand	1
PROEN Corp	Thailand	1
AIMS Data Centre	Malaysia	1
Others	-	5

Source: LH Bank Business Research Analysis based on data from Speeda, Uptime Institute, DataCenterMap.com

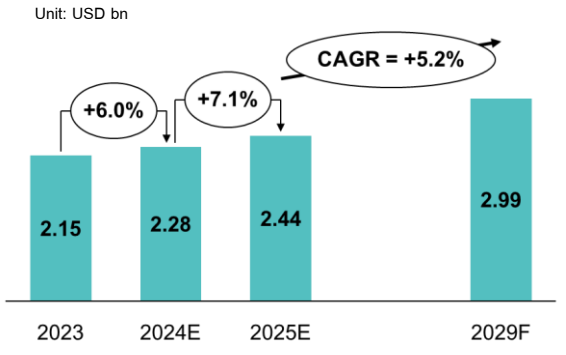
Table 2 Planned and Ongoing Investments in Thailand's Data Center Business by Leading Local and Global Companies (Majority Expected During 2023-2026) (as of May 2025)

Company	Country	Value of Investment (THB mn)
AWS	United States	200,000 (by 2037)
TikTok's subsidiaries	China	126,790
Galaxy Peak DC	Singapore	45,866
Google	United States	32,760
GDS	China	28,000
Digital Edge B.Grimm	Thailand-Singapore	24,520
Equinix	United States	16,500
Bridge Data Centres	Singapore	14,452
GSA Data Center	Thailand-Singapore	13,500
NextDC	Australia	13,700
Vistas Technology	Thailand	6,854
CtrlS	India	5,000
STT GDC	Singapore	4,500
Evolution DC (EDC)	Singapore	4,000
Alibaba Cloud	China	4,000
Siam AI	Thailand	3,250
Huawei Technologies	China	3,000
Supernap	United States	3,000
TELEHOUSE	Japan	2,700
OneAsia	Hong Kong	2,000
Microsoft	United States	N/A

Source: LH Bank Business Research Analysis based on data from BOI, Speeda, Techsauce, Thairath, KrungSri Research, Companies' websites
Note: Included Investment in Cloud Service Business.

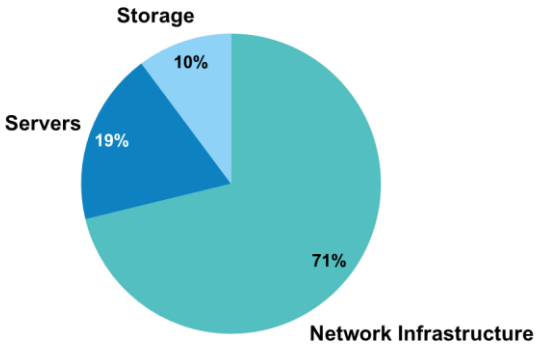
- **In 2023, Thailand's data center market size was valued at USD 2.15 billion (approximately THB 71 billion) and is expected to reach USD 2.44 billion in 2025 (approximately THB 80.5 billion).** The revenue is expected to show an annual growth rate (CAGR 2025-2029) of 5.2%, resulting in a market volume of USD 2.99 billion (approximately THB 99 billion) by 2029. Most of the revenue in Thailand's data center business comes from network infrastructure services, such as data connection and transmission, and network security solutions, accounting for approximately 71% of total revenue. This is followed by revenue from server services, such as large-scale data processing systems (Cloud Computing) and enterprise server systems (19%), and revenue from data storage services, such as cloud storage solutions (10%).

Figure 5 Total Revenue of Data Center in Thailand



Source: LH Bank Business Research Analysis based on data from Statista Market Insights

Figure 6 Share of Thailand Data Center Revenue



Source: LH Bank Business Research Analysis based on data from Statista Market Insights

Data Traffic, IT Spending, and Digital Economy in Thailand

- According to Ericsson's analysis, the number of 5G subscriptions in Southeast Asia and Oceania is expected to reach 630 million by 2030, accounting for approximately 49% of total mobile subscriptions in the region. **Thailand is the leader in Southeast Asia for 5G penetration, comprising 25% of total mobile subscriptions in 2024.** It is estimated that the data traffic per smartphone in Thailand will increase from 19 GB/month in 2024 to 38 GB/month by 2030. Moreover, Thai consumers are expected to experience a significant increase in total data usage, rising from 35 GB/month/subscription in 2025 to 67 GB/month/subscription by 2030. This growth is driven by the increasing streaming on 5G network and the adoption of digital technology and innovations, especially generative artificial intelligence (AI) applications.
- **Gartner estimates that Thailand's IT spending in 2024 was valued at approximately THB 900-1,000 billion, and forecasts that in 2025 it will grow 7.9%YoY to reach THB 996 billion.** The highest growth in spending is expected to be in Data Centers Systems at 17.0%YoY, followed by Software at 16.1%YoY. These figures align with the expected growth of global IT spending, which is projected to increase by 9.8%YoY to reach USD 5,618 billion in 2025, driven by the growth of Generative AI and cloud computing.
- **The Ministry of Digital Economy and Society (MDES) forecasts that Thailand's digital economy in 2025 will reach a value of THB 4.69 trillion, growing 6.2%YoY, which is significantly higher than the**

country's overall GDP growth expected at 1.8%YoY – approximately 3.4 times greater. This demonstrates the power of the digital sector in driving the economy during a time when the global economy continues to face pressure. This growth is supported by government and private sector investments in key projects such as 5G network expansion, Smart City development, Digital ID platforms, and investments in Data Centers and AI technology. The highest-growing industry is Digital Content (9.9%), followed by Telecommunications (8.1%), Digital Services (5.7%), Smart Devices (5.6%), Hardware (5.5%), and Software (4.5%) respectively.

Future Business Outlook

- **Thailand's data center business is well-positioned for steady growth. The market is projected to reach USD 2.99 billion by 2029, with a CAGR growth of 5.2% from 2025 to 2029. This positive outlook is driven by several key factors, including Thailand's high level of internet access, reliable public utilities, affordable and available space, and its strategic location in Southeast Asia.** The country's growing digital economy, driven by the adoption of 5G, e-commerce growth, and widespread digitalization, along with strong government support through initiatives, such as the Thailand 4.0 policy, development in the Eastern Economic Corridor of Digital (EECd), and Board of Investment (BOI) incentives, further strengthens the sector's prospects. Significant investments from both local and global tech companies, such as AWS, Google, TikTok, GDS, and Equinix, highlight Thailand's strategic appeal. Furthermore, the increase in data traffic and usage by Thai consumers, as well as spending on digital technology, particularly Generative AI and cloud computing, by both the public and private sectors are also driving demand for Thailand's data center business.
- **However, Thailand's data center business may encounter medium- to long-term challenges and risks from several factors.** These include potential pressure from the Climate Change Act, which would require greater use of clean energy due to the sector's high electricity consumption; intensifying local competition as well as regional competition from countries such as Singapore, Indonesia, Malaysia, and Vietnam; a shortage of high-level digital talent critical to data center operations; the need for constant investment to keep pace with fast-evolving technologies such as AI and cyber security; and the need for investment in clean energy supply, which is not yet sufficient to meet the needs of the data center industry. However, the Thai government has set goals in the recently revised Power Development Plan (PDP) that prioritize clean and sustainable energy production to support the needs of data centers. Power plant operators, particularly Independent Power Producers (IPPs) and Small Power Producers (SPPs) in Thailand, are also increasingly investing in renewable energy production to meet the rapidly growing demand for clean energy.
- **In addition, according to recent news reports dated July 4, 2025, U.S. has announced its intention to impose restrictions on AI chip exports to Malaysia and Thailand. This measure has not been finalized yet.** However, if implemented, it would significantly impact on Thailand's data center business by limiting access to high-performance chips, increasing costs, and undermining investor confidence. This could potentially slow or reduce investments in Thailand's data center sector.

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