

# Data Center Construction Market in Southeast Asia - Industry Outlook and Forecast 2019-2024

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## Abstracts

The Southeast Asia data center construction market is expected to reach values of approximately \$2 billion by 2024, growing at a CAGR of around 7% during 2018-2024. The research report also offers market size in square ft area and power capacity in megawatts (MW) across geographies.

The investment support from REITs will enable growth of infrastructure by local vendors and incentives from the government will be highly beneficial for continuous investment from both local and global data center developers in the Southeast Asian market. The Southeast Asia data center construction market is driven by increasing deployments across emerging regions such as the Philippines, Vietnam, Myanmar, Cambodia, and Laos. The adoption of water-based cooling systems and rack size of over 45U will lead to innovations in the Southeast Asia data center construction market. The market research report provides in-depth market analysis and segmental analysis of the Southeast Asia data center construction market by product, distribution channel, material, and geography.

The report considers the present scenario of the Southeast Asia data center construction market and its market dynamics for the period 2019 ?2024. It covers a detailed overview of various Southeast Asia data center construction market growth enablers, restraints, and trends. The study includes both the demand and supply sides of the Southeast Asia data center construction market. It also profiles and analyzes the leading infrastructure vendors, construction companies, and data center vendors along with other prominent Southeast Asia data center construction market participants.

Data Center Construction Market in Southeast Asia – Dynamics

Digitalization of business operation is driving the demand for cloud-based service adoption in the Southeast Asia. Governments in Southeast Asia is investment millions of dollars to improve their digital economy. Among the countries, Singapore is the only mature cloud market in Southeast Asia. Most of the organizations in Southeast Asia and other APAC countries operates through the cloud platforms hosted in the Singapore data centers. This is because that market has physical presence of major cloud service providers such as AWS, Microsoft, Google, Alibaba, Tencent, and IBM. With data center in Singapore, cloud providers can provide services to their customers across the APAC region. The majority of the investment in Southeast Asia is brought in by demand for technologies such as cloud-based computing and supported by government across various countries to grow their digital economy. The governments across all the Southeast Asian countries have created an entity to aid in the growth of digital economy that includes increasing network capacity, aiding business to adopt technology and encourage global data center investment into the country. In Southeast Asia, Singapore is investing significantly in connected reality. In the Southeast Asia region, the construction of data centers is experiencing significant growth. However, these data centers are mostly confined to major metro cities. In the Southeast Asia region, most data centers operate in major metros cities such as Singapore, Bangkok, Jakarta, Manila, Hanoi. There are also multiple facilities or disaster recovery space operated across the countries. Most of these facilities comprise of small area and low power capacity. These cities are also experiencing a high amount of investment in recent times, and more data centers are planned for 2019 and 2020.

### Data Center Construction Market in Southeast Asia – Segmentation

This market research report includes a detailed segmentation of the market by electrical infrastructure, mechanical infrastructure, tier standards, general construction, and country. The Southeast Asia data center construction market by electrical infrastructure is classified into UPS systems, generators, transfer switches & switchgear, rack PDU, and other electrical infrastructure. Generators dominated the total market share in 2018, growing at a CAGR of more than 7% during the forecast period. The increasing adoption of generators by facilities operators is primarily to make sure that they operate at 100% availability irrespective of the change in incoming power from utility grids in the market. Flywheel-based UPS systems and lithium-ion UPS systems are gaining immense traction across several countries in the Southeast market.

Switchgear comprises a combination of switches, fuses, and circuit breakers to protect and isolate electrical infrastructure in the facilities in the market.

The mechanical infrastructure in the Southeast Asia data center construction market is

categorized into cooling systems, racks, and other infrastructure. Racks are the fastest growing segment in the market, at a CAGR of over 9% during the forecast period. The installation of racks as pre-assembled infrastructure along with rack PDUs, rack-level UPS, and IT infrastructure is fueling the growth of this segment in the global market. Free-cooling is not facilitated in this region and operators are looking for efficient solutions to reduce their CAPEX and OPEX, conserve data center space, and reduce power supply to cooling units in the market. The use of liquid-based cooling technique installations will boost the demand for other mechanical infrastructure in the Southeast Asia data center construction market.

The Southeast Asia data center construction market by building development is segmented into building development, installations and commissioning services, building designs, physical security, and DCIM. Building development segment occupied the majority of the total market share in 2018, growing at a CAGR of more than 5% during the forecast period. Building development primarily focuses on site selection, preparation, and area construction and concrete-based data center building with windows in the market. Physical security systems that comprise sensors integrated with the existing DCIM solutions for real-time remote monitoring benefits will revolutionize the market. DCIM solutions offer features to control power consumption, improve efficiency, and increase operational capabilities in the Southeast Asia data center construction market.

The standard tier segment in the Southeast Asia data center construction market is divided into Tier I & II, Tier III, and Tier IV. Tier IV facilities are the fastest growing segment in the Southeast market, at a CAGR of approximately 20% during the forecast period. The increasing number of hyperscale developers such as Facebook, Apple, Microsoft, and Google investing in Tier IV facilities is fueling the growth of this segment in the market. In the SEA region, several under-developed projects fall under the Tier III category. Most of the new data centers are being designed as per Tier III standards with a minimum of N+1 redundancy, which can be reconfigured with up to 2N+1 redundancy as and when the demand arises. Such deployments will boost investments in the Southeast Asia data center construction market.

## Market Segmentation by Infrastructure

Electrical

Mechanical

General construction

## Market Segmentation by Electrical Infrastructure

UPS systems

Generators

Transfer Switch and Switchgear

Rack PDU

Other Infrastructure

## Market Segmentation by Mechanical Infrastructure

Cooling Systems

Rack

Other Infrastructure

## Market Segmentation by General Construction

Building Development

Installation & Commissioning

Building Design

Physical Security

DCIM

## Market Segmentation by Tier Standard

Tier I and Tier II

Tier III

Tier IV

## Data Center Construction Market in Southeast Asia – Country

The Southeast Asia data center construction market by country is segmented into Indonesia, Malaysia, Singapore, Thailand, and other countries. Singapore dominated the majority of market share in 2018, growing at a CAGR of over 4% during the forecast period. The increasing investments by Equinix, Singtel, ST Telemedia, Global Switch, Digital Realty, Keppel Data Centres, NTT Communications, 1-Net, Kingsland Data Center, NTT Communications, and Starhub is augmenting the growth of Singapore in the Southeast market. Malaysia has over 30 data center colocation facilities, and the count is growing with the addition of around five data center projects every year in the market. TCC Technology, NTT Communications, KIRZ, Servenet Solution, True IDC, and SUPERNAP (Switch) Thailand are investors across Thailand and fueling the growth of the Southeast Asia data center construction market.

## Market Segmentation by Country

Indonesia

Malaysia

Singapore

Thailand

Other Countries

## Key Vendor Analysis

The Southeast Asia data center construction market is prompting providers to improve the efficiency of the solution to attract the maximum number of consumers. Partnerships with local providers and modular datacenter offerings will enhance revenues for the

vendors operating in the market. The need for local service providers in installation, commissioning, and maintenance services will create job opportunities in the market. The increasing focus on innovations and pricing will boost the intensity of the competition level in the Southeast Asia data center construction market.

The major vendors in the Southeast Asia market are:

#### Infrastructure Providers

ABB

Schneider Electric

Vertiv

Caterpillar

Cummins

Delta Group

Eaton

Euro-Diesel

Fuji Electric

HPE

Hitachi Hi-Rel Power Electronics

Hitec Power Protection

Huawei

KOHLER Group

Legrand Group

Mitsubishi Electric

MTU ONSITE ENERGY (Rolls-Royce Power Systems AG)

Piller Systems

Rittal

### Construction Company

Arup

AWP Architects

CSF Group

DSCO Group

Fortis Construction

Faithful+Gould

Flex Enclosure

Kienta Engineering Construction

M+W Group (Excyte)

NTTFACILITIES Group

PM Group

Powerware Systems (PWS)

Sato Kogyo

### Data Center Investors

AIMS Data Centre

Biznet Data Center

CMC Telecom

Colt DCS

DCI Indonesia

Digital Realty

Equinix

Global Switch

GRAHA TEKNOLOGI NUSANTARA (GTN)

Indosat Ooredoo (Lintasarta)

Internet Thailand Public Company Limited (INET)

Keppel DC

Kepstar Data Center Management

NTT Communications

Philippine Long-Distance Telephone ALPHA (PLDT ALPHA)

PT Telekomunikasi Indonesia

Singtel

ST Telemedia Global Data Centres (STT GDC)

TCC Technology

True Internet Data Center (True IDC)



VADS Berhad

VNTT

XL Axiata

Key market insights include

1. The analysis of Southeast Asia data center construction market provides market size and growth rate for the forecast period 2019-2024.
2. It offers comprehensive insights on current industry trends, trend forecast, and growth drivers about the Southeast Asia data center construction market.
3. The report provides the latest analysis of market share, growth drivers, challenges, and investment opportunities.
4. It offers a complete overview of market segments and the regional outlook of Southeast Asia data center construction market.
5. The report offers a detailed overview of the vendor landscape, competitive analysis, and critical market strategies to gain competitive advantage.

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