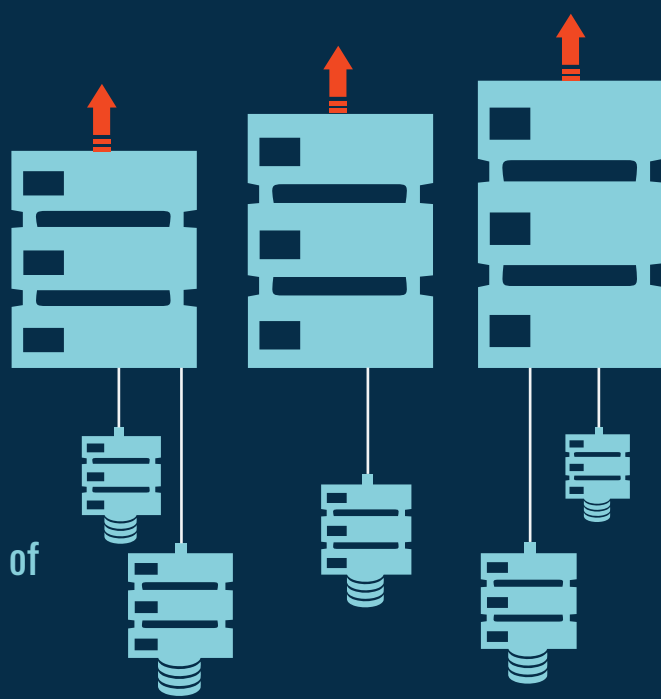# THE RISE OF HYPERSCALE DATA CENTERS

A hyperscale data center is designed to provide one widespread scalable compute architecture made up of small servers called nodes that provide storage and networking.

5 ADVANTAGES OF HYPERSCALE DATA CENTERS

1 Hyperscale data centers are used to support vast cloud infrastructure, but they also share some other features.

2 Hyperscale data centers squeeze a large number of components and gear, in most cases servers, into the smallest footprint possible.
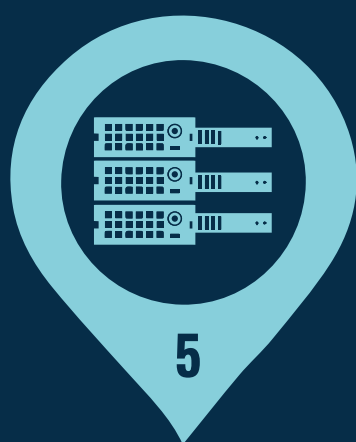
3 They also have very high rates of virtualization, with as many operating system images running on each physical server as possible.
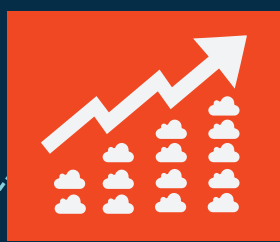
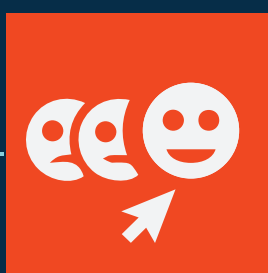**4** Hyperscale offers high-speed, top-of-the-rack networking with speeds of 40 Gbps+.

5 Hyperscale data centers tend to incorporate storage directly into the rack itself, as opposed to separate SANs.
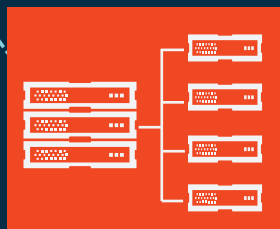
3 REASONS FOR THE GROWTH OF HYPERSCALE DATA CENTERS

1. The complexity and scale of cloud applications is rising: Hyperscale data center supports cloud migration speeds and beyond.

2. Demand for a seamless customer experience: Hyperscale data centers help organizations to leverage the data they have in order to gain customer insights; the goal is to provide better service outcomes for the customers

3. Shift in data center architecture: As the IoT drives the shift towards the hyperscale data centre, it's changing the physical layer of the network.

The growth of the global market for hyperscale data centers is being majorly influenced by the following factors

01 Requirements for high application performance.

02 Rising need for reduction in capital and operational expenditures.

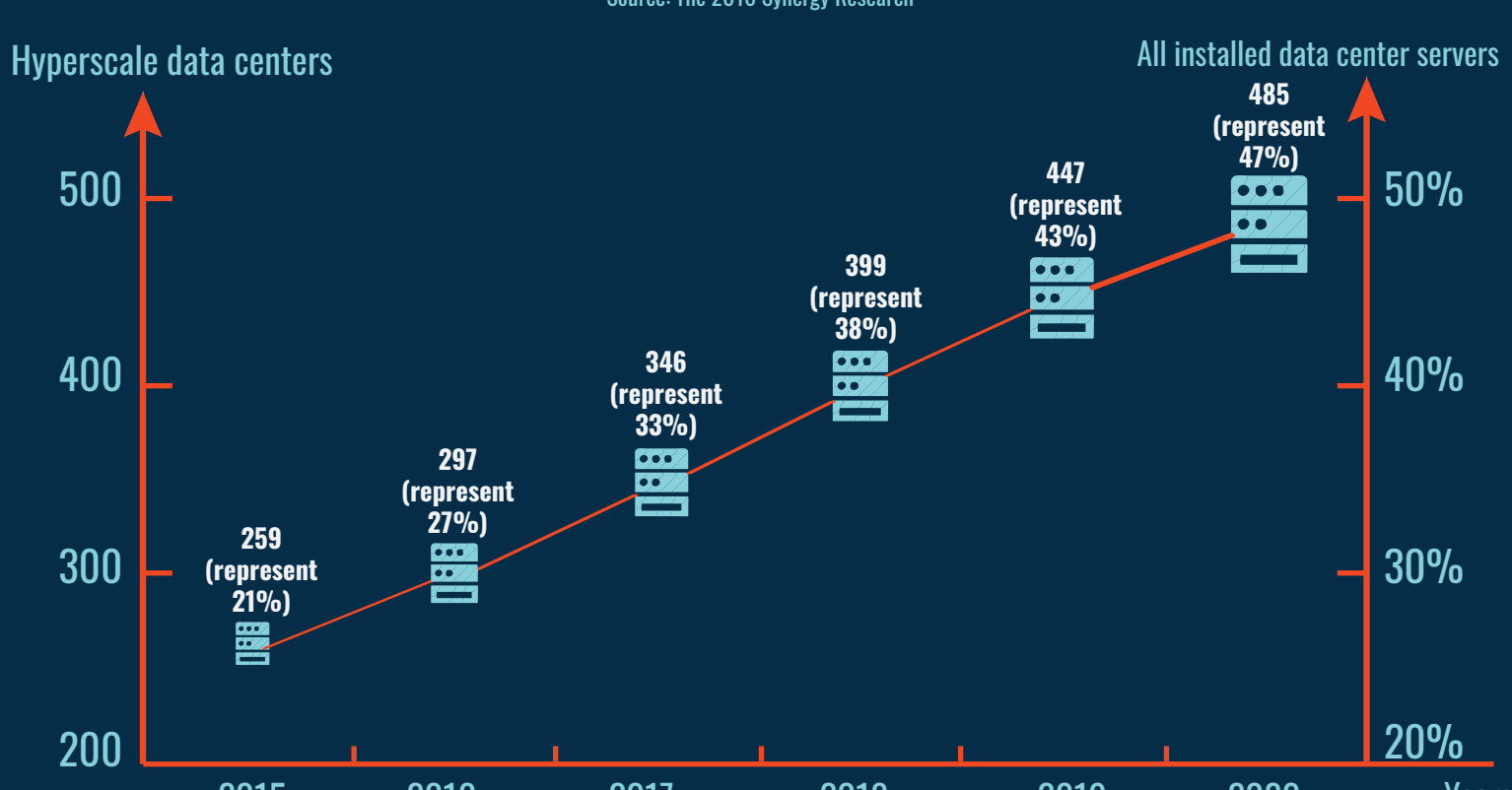**03** Increased spending on data center technology.

04 Rising adoption of solutions for scaling the infrastructure as per the rise in demand

Hyperscale data centers growth each year

Source: The 2016 Synergy Research

Hyperscale data centers

All installed data center servers

- 2015: 259 (represent 21%)
- 2016: 297 (represent 27%)
- 2017: 346 (represent 33%)
- 2018: 399 (represent 38%)
- 2019: 447 (represent 43%)
- 2020: 485 (represent 47%)

Years

Source:
https://www.racksolutions.com/news/data-center-trends/hyperscale-data-center-3-things-to-consider/
http://www.enterprisecloudnews.com/author.asp?section_id=571&doc_id=739272
https://www.pcworld.idg.com.au/article/617973/3-reasons-why-hyperscale-driver-data-centres/ http://www.marketsandmarketsblog.com/hyperscale-data-center-market.html
https://www.cisco.com/c/dam/en/us/solutions/collateral/service-provider/global-cloud-index-gci/white-paper-c11-738085.pdf

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