DCByte

MARKET SPOTLIGHT

SIJORI Growth Triangle:

Powering Southeast Asia's Data Centre Future

Overview

Established in 1994, the **SIJORI Growth Triangle**, encompassing **Singapore**, **Johor** (Malaysia), and the **Riau Islands** (Indonesia) aimed to **leverage the comparative advantages** of each member to **foster cross-border trade, industrial development, and investment.**

The initiative was driven by Singapore's need to overcome land and labour constraints by tapping into the cost-competitive resources of its neighbours while Johor and the Riau Islands sought to benefit from Singapore's infrastructure, and international connectivity.

While the broader subregional economic initiative saw only **moderate uptake in the initial days, the SIJORI market has in recent years re-emerged in the spotlight.** With the rapid rise of cloud adoption, AI technologies, and digital services across Southeast Asia, the region is experiencing surging demand for digital infrastructure—positioning SIJORI as a strategic node in the evolving landscape.

Each SIJORI market is now carving out a distinct role within the broader regional digital infrastructure landscape. Singapore continues to lead as a key connectivity and network hub. Johor has rapidly emerged as a preferred location for hyperscale developments, and Batam is beginning to gain traction, showing early indicators of a development trajectory similar to Johor's initial growth phase.

With digital infrastructure strategies advancing across all three nations, the upcoming wave of growth within the industry is set to deepen regional integration and solidify SIJORI's position as a dynamic and interconnected data centre ecosystem.

SIJORI: The State of Play

Singapore

Singapore remains a **keystone of this digital hub**, with its mature infrastructure, strong regulatory frameworks, and connectivity.

This presence as a regional hub ensures that it remains an attractive location for high-density and high value workloads. While growth has been tempered by past capacity restrictions, expectations around a **new Data Centre Call for Application (DC-CFA) in 2H 2025** are fuelling market optimism and could unlock a new wave of expansion.

Johor

Johor has rapidly evolved from a spillover destination into a **primary expansion hub for regional technology companies.**

Since 2021, the market has grown to over 480MW of operational IT capacity—about half of Singapore's operational IT capacity. This growth has been driven by abundant land and power, strong policy support from Malaysian authorities, and increasing demand from hyperscalers seeking regional expansion. Johor is now seen as a **mature and scalable data centre location, well beyond its early role as a spillover market for Singapore** and currently has an aggregate pipeline of up to 5.7GW.

Batam

Batam, while still small in operational scale, is **emerging steadily with the support of both public and private sector** initiatives such as Nongsa Digital Park.

With **Special Economic Zone (SEZ)** status, proximity to Singapore, and backing under Indonesia's digital economy roadmap, Batam is poised to become a competitive player in the SIJORI ecosystem with a total of over 460MW in aggregate pipeline capacity.

SIJORI: Growth Timeline

2021

Microsoft

Microsoft's first data centre facility in Johor commenced operations.

2022

DC-CFA launched with key objectives centred around sustainability and economy

ByteDance

ByteDance's first data centre facility launched in Johor

sea

SEA Group colocated in a major Johor data centre as an anchor tenant.

2023

CFA winners announced with a total of four winners provisionally awarded 80MW

Microsoft

Microsoft first land site acquisition for data centre development in Johor

2024

IMDA INFOCOMM MEDIA DEVELOPMENT AUTHORITY

IMDA announces the provision of at least 300MW of additional capacity in the near term following the launch of the Green DC Roadmap

ORACLE

Oracle announced a US$6.5 billion investment to establish its first public cloud region in Johor

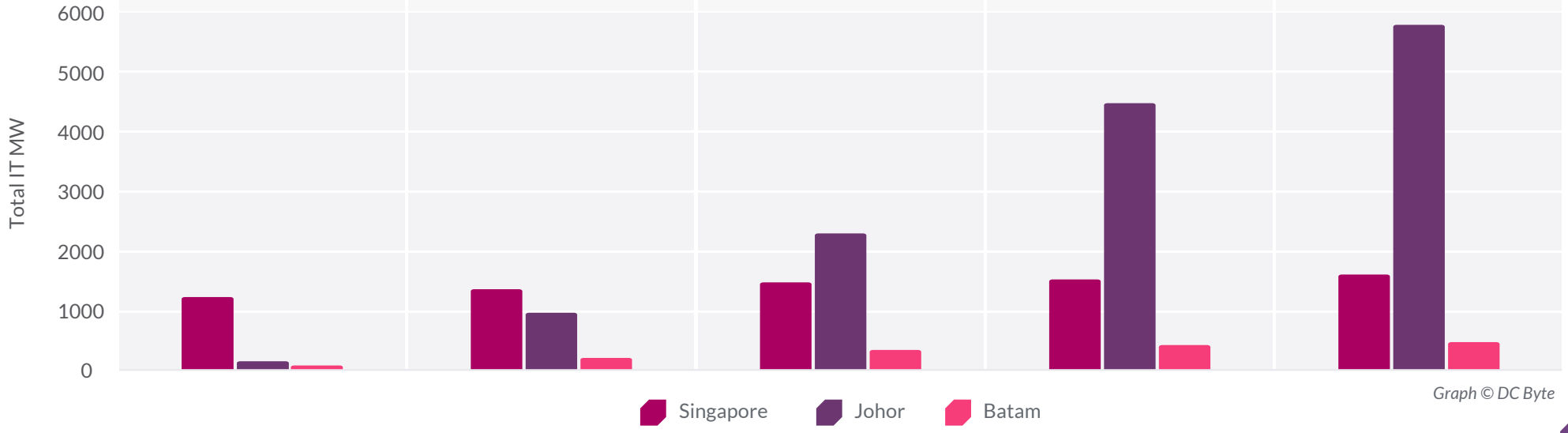
Alibaba

Alibaba announced plans to build the 3rd data centre in Malaysia within the next three years.

2025 YTD

ORACLE

Oracle launched a new Indonesia North (Batam) region

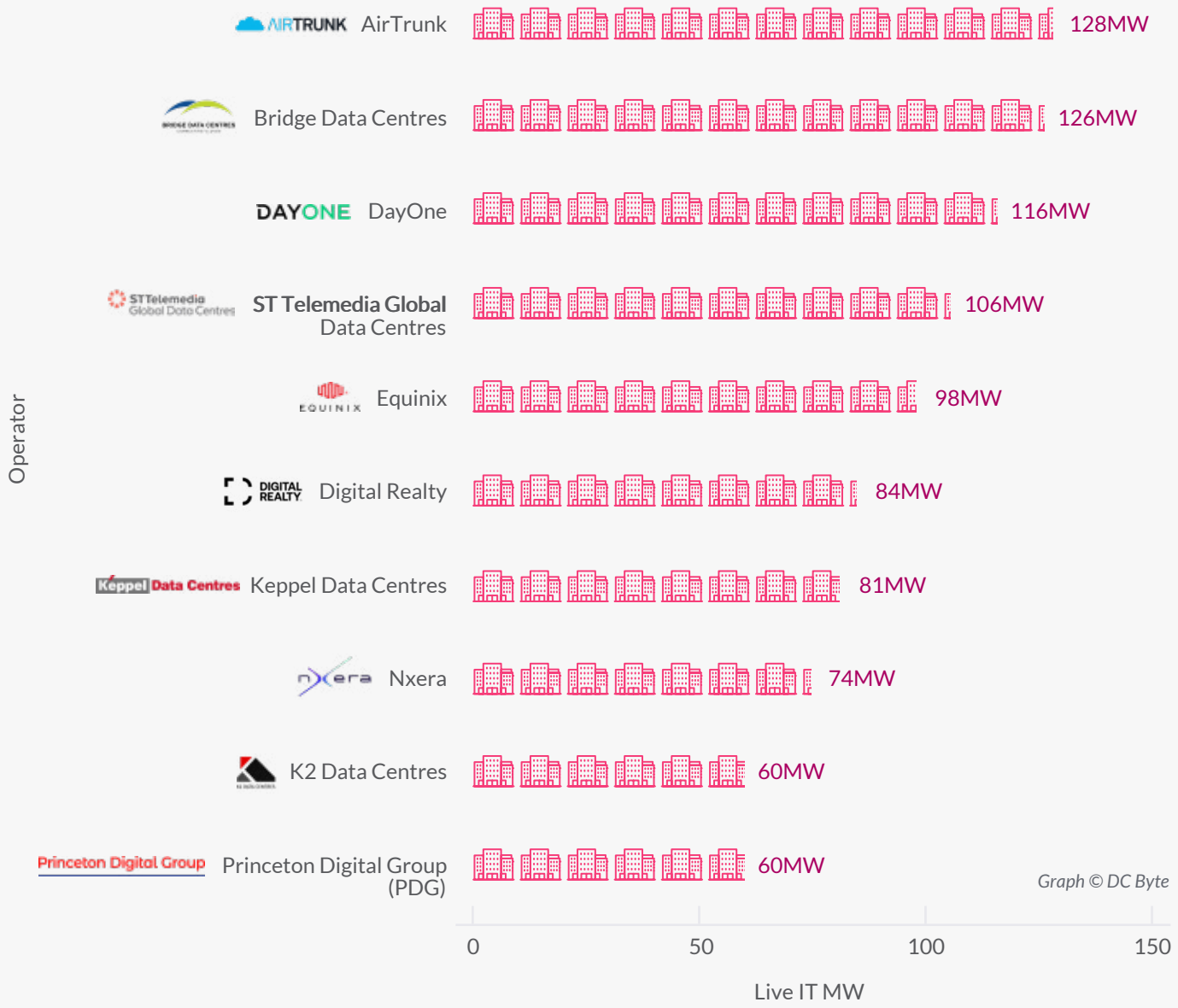


Graph © DC Byte

The SIJORI region is now home to an **increasingly diverse mix of global and regional colocation players** with the top 10 operators collectively representing over 930MW of live IT capacity.

AirTrunk and Bridge Data Centres lead in live capacity, reflecting strong momentum in hyperscale deployments, particularly in Johor, while regional players such as DayOne and K2 Data Centres have also made significant inroads, leveraging first-mover advantage in emerging hubs.

SIJORI: Major Colocation Operators



Singapore Data Centre Market

Several of the region's top colocation operators have built their foundations in Singapore, which continues to serve as the nerve centre of SIJORI's digital ecosystem. Despite land and power limitations, Singapore remains a high-demand market for latency-sensitive, network-dense, and regulated workloads.

Looking ahead, market focus is squarely on the anticipated Data Centre Call for Application (DC-CFA), expected in 2H 2025. IMDA has already outlined its key priorities through the May 2024 Green DC Roadmap, emphasising sustainability, energy efficiency, and innovation. Operators will need to demonstrate clear alignment with national green targets, including improved PUE metrics, integration of renewable energy, and support for grid flexibility. The upcoming CFA is expected to shape not just how much capacity is approved—but the type of infrastructure that gets built.

In terms of workload profiles, Singapore is expected to maintain its role as a hub for interconnection-heavy, enterprise, financial services, and high-security cloud deployments. AI workloads requiring lower latency and tight data governance may also concentrate here, though energy-intensive training clusters may continue to shift offshore to neighbouring markets.

With these dynamics at play, operators and hyperscalers are increasingly pursuing dual-market strategies, anchoring in Singapore while expanding in Johor and Batam. As Singapore awaits policy clarity, the spotlight has turned to Johor—where scale, speed, and regulatory support are already accelerating development.

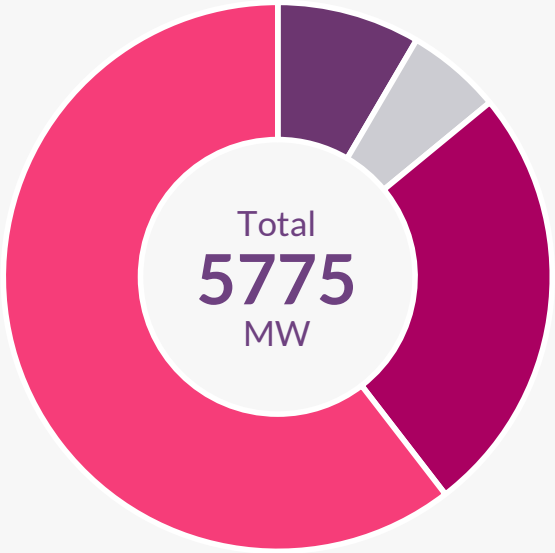
Johor Data Centre Market

The Johor data centre market currently has a total planned capacity of 5.7 GW, eclipsing Singapore's total capacity of 1.6 GW.

While most of Johor's capacity is in the committed and early-stage categories—driven by campus-style developments typically ranging from 200 to 300 MW and designed for phased expansion based on market demand—**the scale of pipeline plans from international operators and cloud service providers indicates strong long-term investment confidence.**

This reinforces Johor's role as a strategic base for hyperscale operations and anticipated workload growth. The current trajectory also reflects how **major cloud service providers are increasingly incorporating Johor into their broader regional infrastructure strategies.**

Total IT MW in Johor



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8.44%	Live	487 MW
5.6%	Under Construction	324 MW
25.51%	Committed	1473 MW
60.46%	Early Stage	3491 MW

Johor's growing visibility in the region has been matched by several significant developments and new areas of opportunity including:

1

Image © DC Byte

Pioneering Campus Deployment in Southeast Asia

Johor is the first market in Southeast Asia to adopt **campus-style deployment models** comparable to those in the United States, characterised by low-rise buildings and large-scale land utilisation. These expansive campuses **allow for phased, high-volume growth** that supports long-term hyperscale demand.

2

Image © DC Byte

AI Infrastructure Potential

Interest in Johor is also rising for AI-related workloads, as operators seek alternative locations with sufficient power, land availability, and lower cost bases. Upcoming projects are actively incorporating **AI-ready infrastructure**, including high-density power configurations and advanced cooling systems such as direct-to-chip liquid cooling.

Local operator and conglomerate YTL is among the pioneers in this space, currently developing Malaysia's first supercomputer at its Green Data Centre Park. The facility will feature the NVIDIA GB200 Grace Blackwell Superchip on NVIDIA DGX Cloud and is scheduled to launch by the end of 2025.

3

Image © DC Byte

Leadership in Modular and Phased Deployment

Johor has become a **regional testbed for emerging deployment models**, particularly modular and phased construction approaches. These strategies enable developers to match buildouts with demand cycles, offering greater scalability and speed-to-market. This trend has also **spurred the growth of a local supply chain** ecosystem to support such technologies.

4

Image © DC Byte

Acceleration of Prefabricated Construction Techniques

The adoption of **prefabricated technologies** is also advancing in Johor. A recent data centre launch at Sedenak Tech Park by Brightray Data Centres reported a total construction timeline of eight months, demonstrating the accelerated delivery made possible through prefabrication methods. This included precision-manufactured steel structure modules and skids. The adoption of such technologies could also contribute to building local expertise in Johor, particularly in the installation of prefabricated systems and the delivery of large-scale infrastructure within compressed timelines.

The growth of Johor's data centre market **reflects years of coordinated planning by the federal and state governments**—including efforts by the Malaysia Digital Economy Corporation (MDEC), the Malaysian Investment Development Authority (MIDA), and Invest Johor, supported by private sector execution in building out the ecosystem.

As the market enters its next phase of development, several practical considerations will need to be addressed to ensure long-term, sustainable industry growth.

Geopolitical Considerations

Malaysia has been impacted by elevated tariffs introduced under the current U.S. administration. As geopolitical dynamics continue to evolve, investor sentiment may be influenced by concerns related to cross-border regulations, supply chain disruptions, and delays in equipment shipments—all of which could impact project delivery timelines.

Short-Term Crunch on Power and Water Transmission

As operators pursue accelerated deployment timelines, challenges around access to power and water have been reported. Both local authorities and the private sector are aware of these constraints, and major transmission infrastructure upgrades are underway. These enhancements are particularly critical for hyperscale and AI-intensive deployments, where power demands are significantly higher.

In parallel, Malaysian authorities have emphasised the importance of incorporating sustainable development plans as a part of project approvals, reinforcing the need for responsible and forward-looking market growth.

Testbed for Sustainable Data Centre Development

This has created a unique dynamic in which Johor has become the first location in Southeast Asia where **hyperscale operators are directly investing in public infrastructure** in a bid to achieve long-term scalability.

A case in point is AirTrunk, which is undertaking public infrastructure works in Johor to support its large-scale hyperscale campus. This includes a partnership with Johor Special Water (JSW) to develop a recycled water system using unused wastewater, which will supply its data centre campuses in the state.

Such initiatives reflect a **growing awareness among private sector stakeholders of the need to proactively address resource constraints linked to accelerated data centre growth.** They also indicate long-term confidence in Malaysia's digital infrastructure outlook, particularly under sustainability-focused development models.

Looking ahead, **Johor may serve as a reference point** for other emerging Southeast Asian markets—**demonstrating how effective public-private collaboration can support more sustainable and resilient approaches to data centre development.**

Image © DC Byte

Batam Data Centre Market

Across the Riau Islands, Early Momentum is Building

While the SIJORI region is often referenced as a collective growth triangle, Batam's data centre development has progressed at a more measured pace compared to Johor. Nonetheless, **early signs of momentum are emerging**, suggesting that **Batam could follow Johor's trajectory from three years ago.**

2024

Turning point for Batam's digital infrastructure development with the signing of its first hyperscale data centre deal

2025

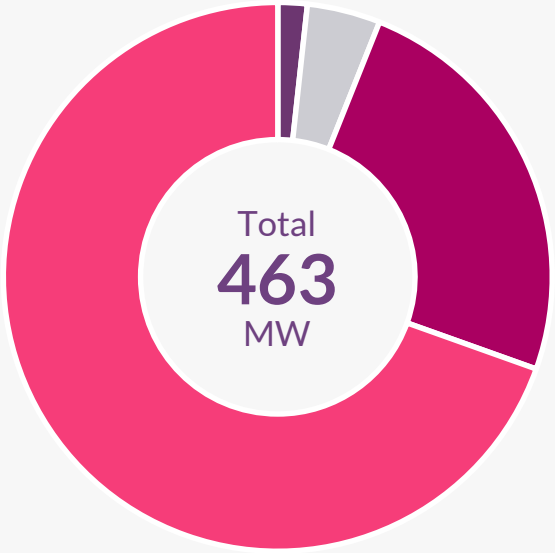
Bank DBS Indonesia and Bank UOB Indonesia jointly extended a IDR 6.7 trillion (US$412 million) loan to support the development of a large-scale data centre campus in Batam.

These developments position Batam on solid footing, with approximately 455MW of aggregate capacity currently in the pipeline. The market benefits from strong government support, a SEZ status, and a cost-competitive environment—all contributing to its growing attractiveness for data centre investment.

Green Energy Potential

Batam is also seeing a **growing pipeline of renewable energy projects** that could enhance the long-term viability of data centre investments in the region. Notably, Indonesia and Singapore announced a joint development of a floating solar farm in Batam in 2024, with a targeted generation capacity of approximately 2GW to be exported to Singapore via undersea cables. This project would not only improve Batam's energy profile and alignment with sustainability goals, but also **strengthen cross-border collaboration in renewable energy development.**

Total IT MW in Batam



Graph © DC Byte

1.79%	Live	8 MW
4.36%	Under Construction	20 MW
24.37%	Committed	113 MW
69.48%	Early Stage	322 MW

Image © DC Byte

Batam Moving Forward

Nongsa Digital Park Expansion

Nongsa Digital Park, Batam's first data centre cluster, has seen the development of two facilities by DayOne and Gaw Capital, respectively. In response to rising demand, the park is reportedly preparing for expansion to accommodate additional plots suited for international operators. These plans are expected to support the next phase of growth and further solidify Batam's role within the broader regional digital infrastructure landscape.

A Growing Prospect in the Riau Islands: Bintan

In the broader Riau island region, Bintan is a growing prospect for data centre development. In an exclusive discussion with DC Byte, Indonesian operator and market leader DCI Indonesia outlined its strategic development plans to build its next data centre campus with Sky Bintan Data Center Park by Salim Group — approximately 700 hectares, with a scalable IT load target of more than 1GW. Sky Bintan Datacenter Park will follow a phased development model, with the initial phase expected to deliver around 500MW of capacity.

Located within a 50-minute ferry ride from Singapore's Tanah Merah Terminal,
Bintan is a designated free trade zone and part of Indonesia's coordinated regional development strategy. A 2024 Presidential Regulation lays out a framework for the integrated development of the Batam, Bintan, and Karimun (BBK) region, targeting approximately IDR 97.2 trillion in annual investment across ongoing and new projects (Source: JDIH).

To support regional connectivity, Sky Bintan Datacenter Park is also exploring the deployment of two new subsea cables linking Bintan to Singapore, in addition to the existing Singapore–Batam–Bintan (B3JS) cable system.

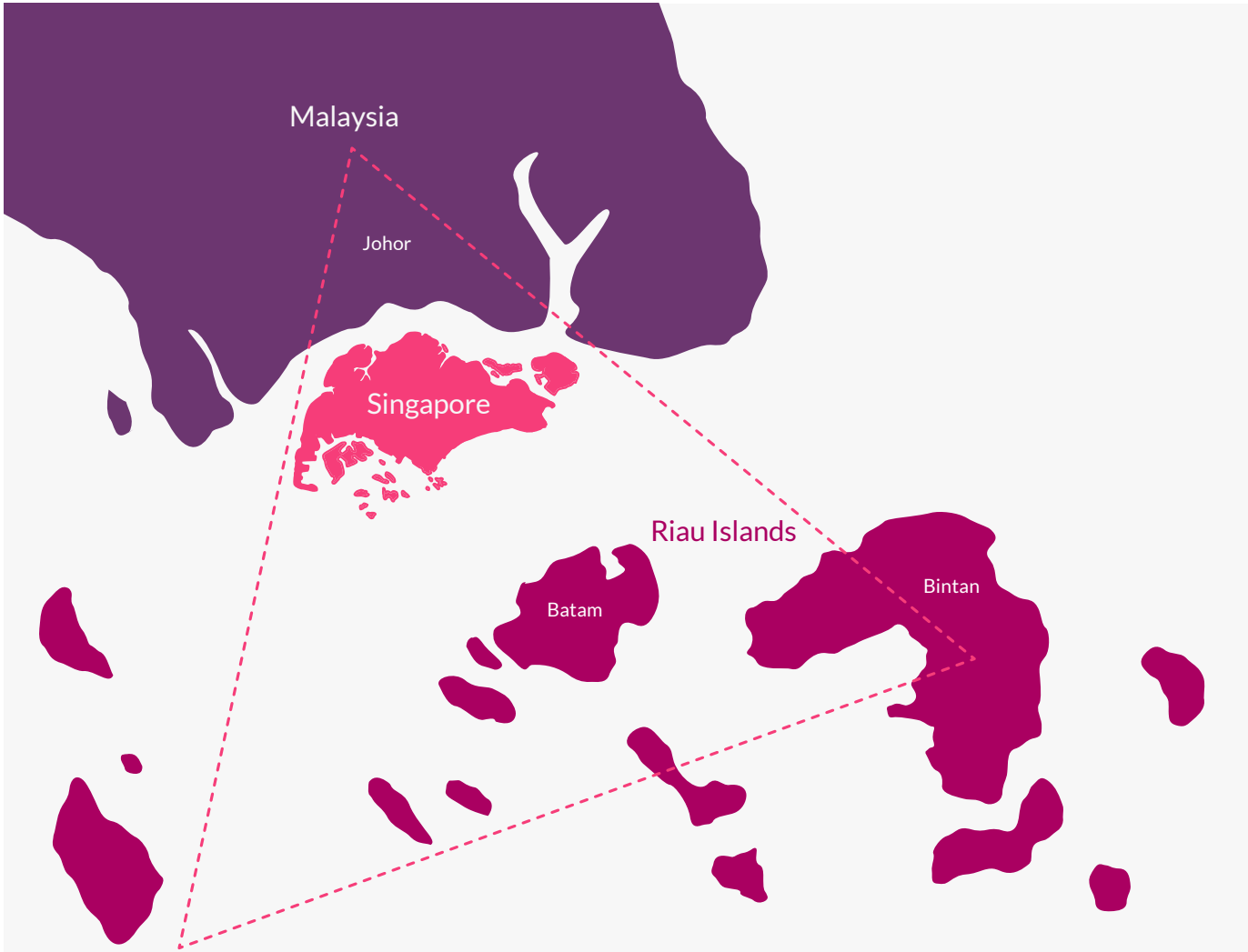
With these factors aligning—governmental support, strategic connectivity, and market incentives—Bintan has the potential to emerge as a data centre destination, contributing to the region's position as a growing digital infrastructure corridor.

Conclusion

The SIJORI Growth Triangle is **undergoing a transition** from its **traditional industrial complementarity toward greater digital interdependence.**

Singapore remains the primary location for critical and latency-sensitive workloads, with some potential for selected AI infrastructure. Johor and Batam are developing more defined roles within the region, moving beyond being viewed solely as extensions of Singapore.

Collectively, the SIJORI Growth Triangle is emerging as an important area for data centre development in Southeast Asia. The ecosystem will allow for regional workload distribution across Singapore, Johor, and the Riau Islands, while also supporting diversification and the use of renewable energy sources available in Johor and the Riau Islands. Cooperation within the SIJORI region will also offer a reference point for how governments can coordinate and facilitate cross-border collaboration in digital infrastructure development.



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About DC Byte

Essential Intelligence for Data Centre Market Players

DC Byte is the world's leading provider of global market intelligence for the data centre sector.

Our platform provides up-to-date information on data centre markets, operators and suppliers around the world, with over 7,500 data centres under review. Through our unparalleled reach and depth, our customers benefit from continually updated and real-time validated data, in addition to cutting-edge analytics, helping them make critical business decisions in the fast-evolving data centre market.

Established in 2017 with offices in London, Washington, Singapore and Sofia and local presence around the world.

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250+ Gigawatts in IT Capacity Tracked

40+ Analysts, Consultants and Developers Covering Global Data Centre Developments

18 Spoken Languages

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Our subscription service allows you to see global and regional markets at a glance and gives you the tools to deep dive into facilities, operators and suppliers fully on-demand.

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