

WWW.RSI-KK.COM

info@rsi-kk.com

(Tel.) 03-6672-6330 (Fax) 03-6388-9283

AZ Omori Building 5th Floor 6-19-8 Minami Ooi,
Shinagawa-ku, Tokyo 140-0013 (Japan)

Monday, May 13, 2024

Global News, financial analyses, data center related laws & regulations and further latest updates about technologies transforming the data center industry.

NEWSLETTER N* NEN12024051004



Japan's ABCI-Q supercomputer to feature 2,000 Nvidia H100 GPUs, research for quantum computers

NVIDIA is powering Japan's ABCI-Q Supercomputer, a major leap in quantum research. This supercomputer, built on NVIDIA's platforms, integrates NVIDIA® CUDA-Q™, an open-source platform for hybrid quantum-classical systems. It's powered by over 2,000 NVIDIA H100 Tensor Core GPUs and NVIDIA Quantum-2 InfiniBand. Constructed by Fujitsu at G-QuAT, the ABCI-Q system aims to advance quantum circuit simulation and machine learning. Furthermore, NVIDIA and G-QuAT/AIST plan to collaborate on industrial applications using ABCI-Q.

Source : [NvidiaNews](#), March 18th, 2024

Open Titan Project and the Announcement of the First Open Source Chip

Open source software has gained substantial growth due to how every individual can contribute to its development and make improvements which make the software more efficient. Now, open hardware is moving on the same path.

Started five years ago, the OpenTitan project, created by lowRISC in partnership with Google and other commercial and academic partners, released the first open-source silicon which produces a fully functional commercial chip and includes the design-verification stage. One of the exceptional features for this chip is the use of on-hardware cryptographic keys called Root of Trust (RoT) which is inaccessible remotely and even have been made sure to not be cracked by future quantum computers.

Unlike open-source software, the design costs for open hardware are much higher, the contributors are a smaller community, and the how to fix a bug in hardware once the batch is distributed is still a concern.

Source : [IEEE Spectrum](#), February 13th 2024



Datacenters and the Expected Changes to Achieve the Net Zero Goals

The emergence of new technologies such as Artificial Intelligence, Internet of Things, cryptocurrency, and the digitalization of various sectors have pushed the demands for the data centers to a record high, though the providers are under scrutiny to adjust and adapt new technologies in order to improve the volume of resources they use; for instance, energy and water. Therefore, all over the world new rules, regulation, and technologies have been put to service in order to alleviate the achieving of net zero goals set by governments and organizations (2050).

Source : [Datacenter Dynamics](#), February 7th 2023

Equinix and PGIM Real Estate Enter Into \$600 Million JV for First xScale® Data Center in the U.S.

Equinix, Inc., headquartered in Redwood City, California, and PGIM Real Estate, the real estate investment and financing arm of PGIM, Prudential Financial's global asset management business, have entered into a \$600 million joint venture. The collaboration aims to develop and operate the first xScale data center in the US. The data center will be situated in the Silicon Valley region of California. The two-story facility, named SV12x, will be constructed in two phases and is expected to offer over 28 MW of power capacity upon completion. SV12x is located at Equinix's Great Oaks data center campus in San Jose, California, alongside four existing Equinix International Business Exchange™ (IBX®) data centers. The first phase of the facility is scheduled to be completed in Q2 2024.

Source : [Equinix](#), April 15, 2024

Meta Reports Fourth Quarter and Full Year 2023 Results

Meta Platforms, Inc., based in Menlo Park, California, released its financial results for the quarter and full year ended December 31, 2023. In the fourth quarter of 2023, Meta Platforms, Inc. reported revenue of \$40.11 billion, marking a 25% increase compared to the same period the previous year.

For the full year 2023, the company's revenue amounted to \$134.90 billion, reflecting a 16% year-over-year increase. "We had a good quarter as our community and business continue to grow," said Mark Zuckerberg, Meta founder and CEO. "We've made a lot of progress on our vision for advancing AI and the Metaverse."

Source : [Meta](#), February 1st, 2024

Amazon Web Services and NVIDIA Extend Collaboration to Advance Generative Artificial Intelligence Innovation

NVIDIA and AWS have decided to deepen their strategic partnership to further the development of Generative AI. The collaboration will see AWS offering NVIDIA's GB200 Grace Blackwell Superchip and B100 Tensor Core GPUs. The goal is to provide customers with the most advanced and secure infrastructure, software, and services, enabling them to leverage new generative AI capabilities. The partnership will incorporate NVIDIA's latest multi-node systems, AWS's Nitro System, AWS Key Management Service (AWS KMS) advanced security, Elastic Fabric Adapter (EFA) petabit scale network-

ing, and Amazon Elastic Compute Cloud (Amazon EC2) Ultra Cluster hyper-scale clustering. This joint effort aims to facilitate customers in building and running real-time inference on multi-trillion parameter large language models (LLMs) more efficiently, at a larger scale, and at a lower cost. Generative AI, which can create realistic artifacts based on existing data, stands to benefit from this collaboration, potentially leading to advancements in various sectors, including healthcare and life sciences.

Source : [AWS Press Center](#) & [NvidiaNews](#), March 18th, 2024

Artificial Intelligence to add 1 million tons to copper demand by 2030 - report

A report indicates that by 2030, the advent of artificial intelligence and data centers could boost copper demand by an additional 1 million tons. This forecast was put forth by Trafigura, a commodity trading firm. The burgeoning AI industry could intensify the imbalance between copper supply and demand.

Furthermore, the ongoing energy transition, encompassing electric vehicles and renewable energy technologies, is anticipated to further stimulate copper consumption. In summary, the expansion of AI and data centers, coupled with the energy transition, could have a profound influence on the global copper market in the future.

Source : [Reuters](#), April 09th, 2024

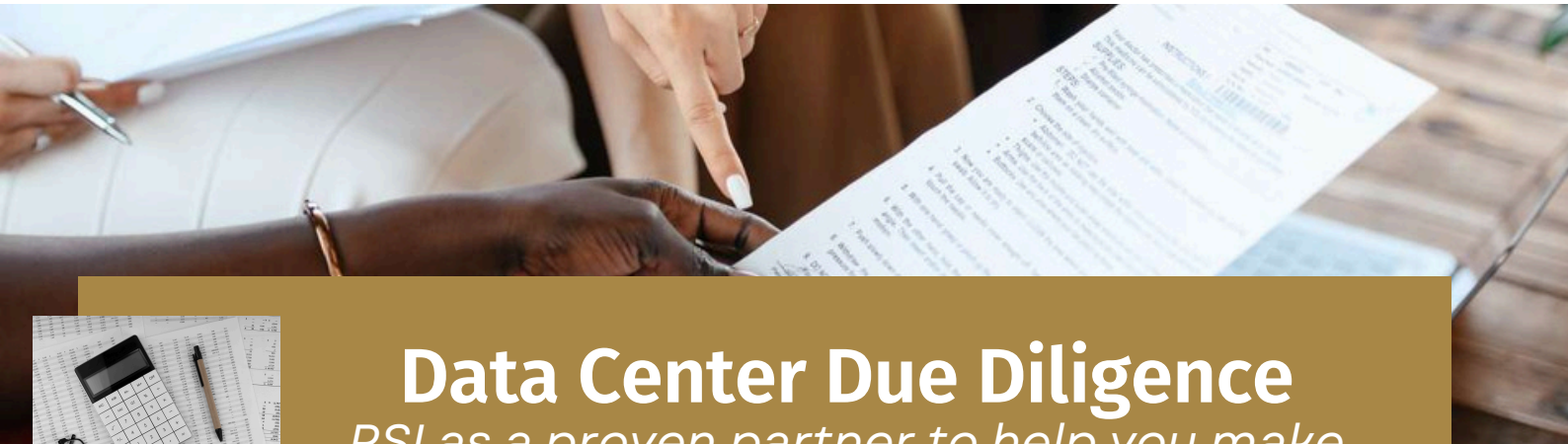
OpenAI opens first Asia office in Tokyo as ChatGPT use grows

OpenAI, has recently expanded its global footprint by opening its first office in Tokyo, Japan. This move is part of their broader strategy to increase their presence worldwide. Tadao Nagasaki has been appointed as the new President of OpenAI Japan to spearhead commercial and market engagement initiatives.

In a bid to cater to the region, they are offering local businesses early access to a GPT-4 custom model that is specifically optimized for the Japanese language. This model is cost-effective and operates three times faster than its predecessor, enhances the translation and summarization of Japanese text.

Major Japanese corporations like Daikin and Toyota, along with local governments, are already leveraging ChatGPT to boost their efficiency. This expansion underscores Tokyo's global leadership in technology and its culture of service and innovation.

Source : [KyodoNews](#), April 15, 2024



Data Center Due Diligence

RSI as a proven partner to help you make informed investment decisions

RSI provides a proven strategy for business success by thoroughly evaluating all aspects of your Data Center Due Diligence projects, from the proposed land to the existing facility, to assess its asset value. The condition of buildings and facilities, and the local land characteristics are

essential in deciding whether to add it to the portfolio as an investment. RSI's experienced Staffs can assist potential investor and seller with land and facility due diligence for data centers and data center evaluation while developing a long-term business strategy.

RSI Data Center Due Diligence

RSI support for due diligence is widely demanded by professionals in various range of industries, including but not limited to data center provider companies, real estate investment companies, and major construction companies. We help them maximize results for their business. Most (but not all) of our clients' demands for data center due diligence support are as follows:

- Data Center Asset Evaluation
- Facility Standards Assessments
- PUE calculation support
- Design, supervision, and site verification
- Due diligence of real estate and proposed land acquisitions
- Due diligence of existing data centers

What RSI has to its credit

RSI has successfully achieved various projects in Data Center Due Diligence. It has indeed supported numerous global companies while applying recognized Japan and global standards and methods in all aspects of site due diligence, data center evaluation as well as facility due diligence.

RSI work consists namely of an in-depth analysis of various aspects of the projects, highlighting potential risks and proposing efficient risks mitigation or, when applicable, risks elimination, while evaluating the matching between the potential deal and the client's portfolio.

For further scope of services provided by RSI, please reach out to us with your inquiry at the contact information depicted below.

+81 3-6672-6330

RSI

5F AZ Omori Building 6-19-8, Minami Ooi,
Shinagawa-ku, Tokyo 140-0013
www.rsi-kk.com / info@rsi-kk.com

Disclaimers

Disclaimer

This newsletter is made available for informational purpose only to ensure that you are kept up to date with the latest developments, insights and trends about major data center and information technology likely to transform these industries. The newsletter covers topics specifically related to latest and future technology developments; financial reports & analyses and business mergers & acquisitions involving major global companies; laws and regulations in north American, European Union and Asia Pacific.

By using this newsletter, you understand that there is no legal relationship between you and the newsletter or our company. The newsletter should not be used as a substitute of competent legal advice or a licensed professional in your state or your country.

This newsletter may contain offers about our products & services or our partner's. However, we will not sell, lend or make your email available to any third parties. You will not receive emails from our partners directly as a result of the use of this newsletter. We will keep your email address on our database for as long as we run the newsletter service or until such a time that you unsubscribe. To unsubscribe to this newsletter, please drop us an email using the link available at the contact information below.

05/05

RSI

+81 3-6672-6330

5F AZ Omori Building 6-19-8, Minami Ooi,
Shinagawa-ku, Tokyo 140-0013

www.rsi-kk.com / info@rsi-kk.com