

BI-WEEKLY

NEWSLETTER

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RSI

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

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Microsoft's New 'Microfluidic' Tech Cools AI Chips From Within

Microsoft is enhancing its data center operations with AI-driven cooling systems and faster networking technologies to support increasingly demanding workloads. The company is using machine learning to optimize temperature control and airflow, reducing energy consumption while maintaining performance. These innovations are part of a broader strategy to improve efficiency and sustainability across its global infrastructure. Faster networking components are being deployed to handle the surge in data traffic from AI and cloud services. Together, these upgrades reflect a shift toward smarter, more adaptive data center environments capable of meeting future computational needs.

Source: [DatacenterKnowledge](#), September 24th, 2025

What Is Rack-Scale Computing, and Why Is It Relevant Again?

Rack-scale computing is regaining relevance as data centers seek more efficient ways to manage high-performance workloads, especially those driven by AI and cloud services. Instead of treating servers as isolated units, this approach pools resources like CPUs, GPUs, memory, and storage across entire racks, enabling dynamic allocation based on demand. Advances in interconnect technologies and modular hardware have made it easier to implement rack-scale architectures with low latency and high bandwidth. This model improves scalability and energy efficiency, addressing the limitations of traditional server-centric designs. As workloads become more complex and data-intensive, rack-scale computing offers a flexible foundation for future infrastructure. Its resurgence reflects a broader shift toward composable systems that prioritize performance, agility, and resource optimization.

Source: [Datacenterknowledge](#), September 15th, 2025

Inside the world's most powerful AI datacenter

Fairwater is the most advanced AI datacenter ever built, designed to operate as a unified supercomputer rather than a traditional cloud facility. It spans 315 acres in Wisconsin and houses three massive buildings filled with densely packed servers and custom accelerators. These are interconnected through a flat, high-bandwidth network that enables ultra-fast communication across hundreds of thousands of NVIDIA GPUs. The datacenter delivers performance levels ten times greater than the world's fastest supercomputer, supporting large-scale AI training and inference.

Cooling is managed by a closed-loop liquid system powered by one of the largest chiller plants globally, eliminating water waste while maintaining thermal efficiency. Storage has been reengineered to handle exabyte-scale throughput, ensuring seamless access to vast datasets. Fairwater is part of a global AI WAN, linking multiple facilities into a distributed mesh that enhances scalability and resilience. Altogether, it represents a major leap in infrastructure for frontier AI, blending extreme performance with sustainable design.

Source : [Bolg.microsoft](#), September 18th, 2025

Data Center Talent Crisis: 40% of Staff Plan Job Changes Despite Rising Salaries

Despite rising salaries in the data center industry, a significant portion of the workforce is considering job changes, highlighting a deepening talent crisis. Around 40% of staff are planning to leave their current roles, driven by factors such as burnout, lack of career progression, and evolving skill demands. The sector is facing mounting pressure to retain experienced professionals while also attracting new talent capable of handling increasingly complex infrastructure. Employers are responding with higher pay and expanded training programs, but these measures are not fully addressing the underlying dissatisfaction. The rapid growth of AI and cloud services is intensifying the need for specialized skills, making workforce stability a critical issue. Without strategic changes in workplace culture and career development, the data center industry risks long-term disruption from talent shortages.

Source: [Datacenterknowledge](#), September 23th, 2025

Special Feature : From (server) farm to fork : Could data centers supply produce

Data centers are being reimagined as potential hubs for food production, leveraging their excess heat and energy to support vertical farming and greenhouse operations. This concept explores how server farms could integrate agricultural systems that benefit from the controlled environments and thermal output of IT infrastructure. By repurposing waste heat, data centers could reduce energy costs for growing produce while contributing to local food supply chains. The idea aligns with sustainability goals, offering a dual-purpose model that supports both digital and agricultural ecosystems. Challenges remain around scalability, logistics, and regulatory frameworks, but pilot projects are beginning to test feasibility. If successful, this fusion of technology and agriculture could redefine how urban spaces utilize infrastructure for both computation and cultivation.

Source: [W.media](#), September 29th, 2025

NVIDIA intends to invest up to US\$ 100 billion in OpenAI

NVIDIA is reportedly planning a massive investment of up to \$100 billion in OpenAI, signaling a deepening partnership between the chipmaker and the AI research organization. The move reflects NVIDIA's strategic ambition to dominate the AI hardware space, especially as demand for high-performance GPUs continues to surge. OpenAI, known for its cutting-edge models like GPT, relies heavily on NVIDIA's chips to power its training infrastructure, making the two companies increasingly interdependent. This potential investment would not only secure OpenAI's access to critical hardware but also strengthen NVIDIA's influence over the future of generative AI. The deal is expected to involve a mix of direct funding, infrastructure support, and long-

term supply agreements. Industry analysts view this as a bold response to growing competition from other tech giants like Google and Meta, who are developing their own AI accelerators. If finalized, the partnership could reshape the AI landscape by consolidating power between a leading hardware provider and a top-tier AI developer. The article also hints at broader implications for cloud providers and enterprise AI adoption, as such a deal could shift the balance of innovation and control.

Source: [W.media](#), September 23th, 2025

Alibaba Cloud announces global expansion plans, partners with NVIDIA for AI development

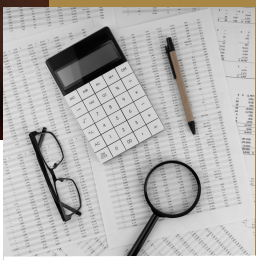
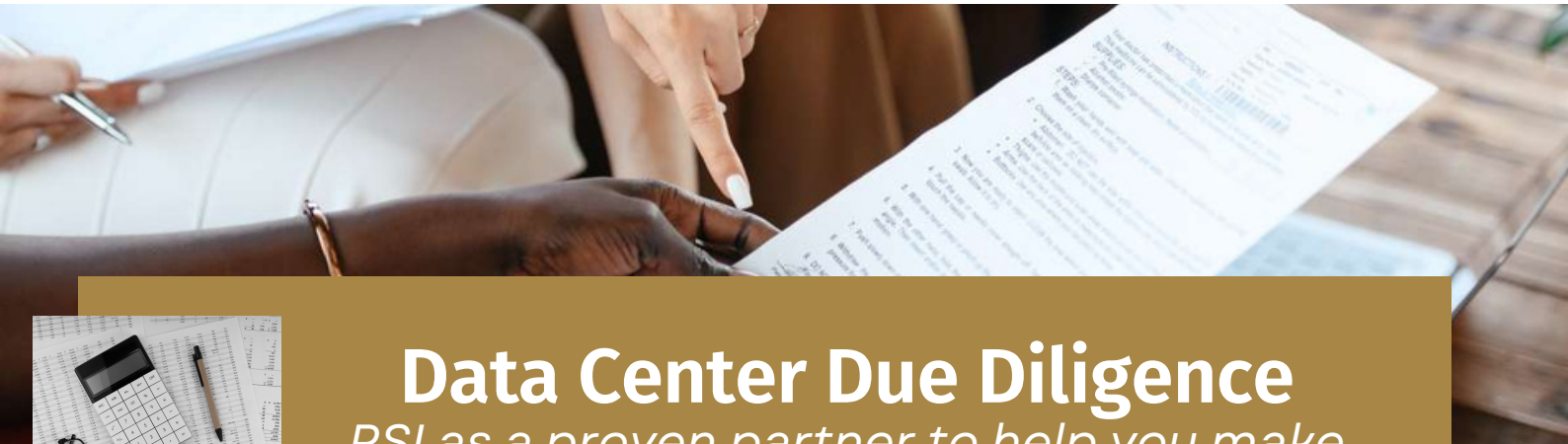
Alibaba Cloud is expanding globally with new data center regions and upgraded infrastructure to meet rising demand for AI services. As part of this initiative, it is partnering with NVIDIA to integrate advanced GPU technologies that enhance its cloud-based AI capabilities. This collaboration supports the development of generative AI and large-scale model training, positioning Alibaba Cloud as a key player in high-performance computing. The expansion includes investments in energy-efficient architecture and scalable systems tailored for AI workloads. With these moves, Alibaba Cloud strengthens its competitive edge in the international cloud market, especially in regions prioritizing AI innovation.

Source: [W.media](#), September 25th, 2025

Surging AI use to accelerate demand for neocloud services: JLL

Surging demand for AI is accelerating the need for NeoCloud services, which combine traditional cloud infrastructure with high-performance computing tailored for artificial intelligence. Enterprises are shifting toward data centers that offer greater scalability, energy efficiency, and AI optimization to support large language models and generative AI. This transformation is influencing decisions around location, cooling systems, and power capacity, as legacy setups struggle to meet the new requirements. NeoCloud emerges as a flexible and powerful solution, capable of adapting to the evolving computational demands of AI. As a result, investment in next-generation data centers is expected to rise sharply, with real estate and technology sectors aligning to support this growth.

Source: [W.media](#), September 16th, 2025



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.

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