BI-WEEKLY

NEWSLETTER

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Monday, September 1st, 2025

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

NEWSLETTER N* NEN22025091007



Financial Services Are Quietly Choosing Bare Metal for Low-Latency Trading

Financial firms are increasingly adopting bare metal servers to achieve ultra-low latency in trading, where microseconds can determine profitability. Unlike virtualized environments, bare metal offers dedicated compute power, eliminating hypervisor overhead and noisy neighbor issues. Key workloads like highfrequency trading, risk modeling, and blockchain operations benefit from predictable performance and direct market access. Colocation near major exchanges (e.g., NYSE, LSE) further reduces network latency. Emerging trends include liquid cooling, hardware-as-aservice, and FPGA/GPU acceleration for AI-driven trading. Bare metal also enhances security, compliance, and full-stack control, making it a strategic infrastructure choice for financial services.

Source: Datacenters.com, August 14th, 2025

Cloud vs. Edge: Where Should AI Training Really Happen?

infrastructure decisions in 2025 hinge whether training and on inference should occur in the cloud, at the edge, or through a hybrid approach. Cloud platforms offer scalable compute and centralized data intensive training tasks, but come with high costs and latency concerns. Edge computing excels in real-time responsiveness, privacy, and offline capabilities, making it ideal for inference in like applications autonomous vehicles and smart agriculture. Hybrid models are gaining combining traction. cloud-based training with edge-based inference to balance performance. cost. and Organizations compliance. are adopting increasingly flexible. integrated strategies that connect cloud and edge through APIs, CI/CD pipelines, and federated learning. This shift enables faster decision-making, improved scalability, and enhanced user experiences.

Source: <u>Datacenters.com</u>, August 14th, 2025

Balancing the Grid: Energy Infrastructure Financing in the Age of AI and Data Centers

Entergy Louisiana plans to invest \$3.2 billion in gas-fired power plants to support Meta's \$10 billion data center, raising concerns about environmental impact and financial risks consumers. Critics argue the move grid slow strain the and renewable energy adoption, while Meta commits to adding 1,500 MW of solar power to offset the demand. Data centers are expected to consume 7.5% of U.S. electricity by 2030, prompting investors to rethink infrastructure strategies. They are exploring hybrid portfolios, greenfield projects, and

policy engagement to balance reliability with Sustainability. The shift brings risks like fossil stranded assets and regulatory delays, but also opportunities in innovation and demand growth. The situation highlights the complex trade-offs in powering AI without expansion compromising climate goals.

Source: Ainvest, August 20th, 2025

AI in the Financial Services Industry

AI is increasingly integrated into financial services, powering functions such as credit evaluation, fraud detection, trading strategies, and mortgage processing, with generative Al adding new capabilities. Regulators like the CFPB and state agencies are intensifying oversight, raising concerns about algorithmic bias, data privacy, and compliance with existing laws such as ECOA and FCRA, which were not designed with Al in mind. A recent enforcement action by the Massachusetts Attorney General against Earnest, a student loan provider, illustrates the legal risks of opaque AI decision-making and the need for clear consumer disclosures. In response, financial institutions are investing in governance employee training. frameworks. transparency measures to ensure responsible AI deployment and maintain trust with regulators and customers.

Source: consumerfinancemonitor, August 18th, 2025

The AI building boom is bound to bust

AI hyperscalers are pouring billions into data center infrastructure, benefiting manufacturers, energy firms, and construction companies. Major players like Caterpillar, Siemens, and Amphenol are experiencing strong growth as investor capital flows into the sector. With projections of \$3 trillion in AI infrastructure spending by 2028, tech giants and startups are driving a digital gold rush.

Private equity firms are also investing heavily, acquiring data center operators and targeting high-growth opportunities. Suppliers and builders are scaling rapidly to meet demand, prioritizing speed over cost in deployment. However, concerns remain that the boom may eventually lead to overspending and a painful market correction.

Source: <u>Japantimes</u>, August 18th, 2025

Data center semiconductor trends 2025: Artificial Intelligence reshapes compute and memory markets

intelligence rapidly Artificial transforming data center semiconductor landscape, pushing the market toward an estimated \$492 billion by 2030. GPUs remain central to Al workloads, with Nvidia commanding a dominant share, though major cloud players like Google, Amazon, and Microsoft are accelerating investment in custom Al ASICs diversify optimize performance. То address memory bottlenecks, technologies such as DDR5, HBM, and CXL are being adopted, while photonics and advanced packaging are revolutionizing

efficiency. Geopolitical interconnect factors are also shaping the industry, with China ramping up domestic chip production in response to export controls, even as U.S. firms maintain technological leadership. Meanwhile, startups like Groq and Cerebras are introducing disruptive, architectures energy-efficient inference. Overall. the undergoing a profound architectural shift, redefining how compute and memory are designed and deployed in the age of AI.

Source: Yolegroup, August 12th, 2025

OpenAI hires another Google TPU alum to join chip team

OpenAI has hired Safeen Huda, a former Google TPU software engineer, to join its growing custom chip team. Huda worked on hardware-software co-design and energy optimization for Google's TPUs and was cited in DeepMind's Gemini 2.5 paper. He joins Richard Ho, another Google TPU veteran, who now leads OpenAI's hardware efforts.

The company is reportedly collaborating with TSMC and Broadcom to develop custom Al training and inference chips, with mass production expected in 2026. OpenAl's chip team now includes around 40 members, signaling a serious push into semiconductor development

Source: datacenterdynamics, August 20th, 2025

Growth of data centers requires new policies to mitigate local community impacts

The rapid growth of data centers is placing heavy demands on local energy and water resources, raising concerns about sustainability and community impact. A University of Michigan report argues that tax incentives often fail to deliver meaningful economic benefits, while shifting costs to residents. These facilities typically offer few long-term jobs and can prolong reliance on fossil fuels. The report recommends stronger regulations, including mandatory energy audits and greater transparency resource use. points lt international models like Germany's Energy Efficiency Act as potential guides for policy. U.S. Advocates urge redirecting public funds toward education, clean energy, and workforce development to ensure more equitable outcomes.

Source: Fordschool, July 17th, 2025



RSI DC Operations Support

Highly experienced bilingual staffs available to ensure optimum system performances

RSI is proud to introduce their bilingual Data Center Operations (DC Ops) Support staffs to support you in your daily operations and take immediate necessary actions to address frequent or infrequent issues happening in your data center. Because RSI is aware of how

valuable are your DC facilities, they can be provided with an experienced and bilingual staff to proactively help you maintain reliability and uptime in your data center facilities during daytime or nighttime, whether on weekends or public holidays.

On-site Data Center Operations

RSI can provide 24/7 on site staffs to efficiently support all aspects of your data center's critical physical infrastructure to ensure high availability and performance.

RSI can guarantee that all work performed by its experienced technicians is completed to high quality, while maintaining service level agreements, and without any impact neither on your business nor on your clients.

RSI DC operations staffs can deploy their know-how and best practices to efficiently handle your entire data center facilities, including all servers, storage, networking, power and cooling equipment, in order to ensure you a continuous access and an optimum availability.

What RSI's Customers Say

Through a long term relationship, RSI has dispatched staffs to provide onsite support to various clients across Japan including global and major domestic companies. Most of RSI clients include DC providers, DC services providers and diverse financial institutions.

RSI is proud of the trust built through the excellent quality of its customer relationships in addition to its high quality work that its clients have consistently testified.

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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