

The strategic advantage of local data centers for the financial industry

Between AI innovation pressure and growing regulation, banks, payment service providers and asset managers are faced with a balancing act. Local colocation data centers offer the way out: state-of-the-art infrastructure for computing-intensive AI workloads, maximum security and flexible scalability directly on local soil.

In the financial industry, trust is the hardest currency. Hardly any sector of the economy is subject to stricter regulatory requirements. And rightly so: banks, insurance companies, payment processors and other financial service providers manage the money and data of millions of people, a relationship of trust that must be legally sound. At the same time, the pressure on technological innovation is increasing. Fintechs, neobanks and international platform providers are setting new standards for speed, user-friendliness and cost efficiency.

The question here is: How do you modernize a critical IT infrastructure in an agile and cost-efficient manner, without disrupting regulatory requirements and with full data control?

The answer, which is becoming increasingly clear in practice, is: put local data centers, at the heart of sovereign hybrid architecture. This is not an alternative to the cloud, but rather its secure foundation. It creates hybrid architectures that combine performance, compliance and flexibility without data leaving the infrastructure shell in an uncontrolled manner.

An industry under growing pressure

DORA (the EU's Digital Operational Resilience Act) has been in effect since January 2025. The framework requires financial institutions in the EU to demonstrably manage digital operational resilience: clear requirements for ICT risk frameworks, resilience, incident reporting and control of data with third-party providers.

Specifically, financial institutions must be able to provide complete evidence to supervisory authorities such as BaFin or the ECB: Where is the data? Who has access? How quickly can operations be restored after a disruption? For global hyperscalers with data centers outside the EU or in jurisdictions where data protection law is unclear, the obligation to provide evidence becomes a hurdle. Outsourced IT functions must always remain auditable and controllable.

A local colocation data center, on the other hand, operating under GDPR and common certification standards such as ISO 27001, offers a structural compliance advantage.

Data sovereignty and digital sovereignty

The current geopolitical situation makes one realization irreversible: Anyone who operates critical IT on infrastructures that lie outside their own legal area is carrying a strategic risk. This is not an abstract threat for banks and payment processors who process highly sensitive transactions and customer data on a daily basis.

A local colocation data center creates structural clarity: hardware is owned by the company, access rights are controlled by oneself, and operations are completely within the German and European legal framework. No unilateral changes by external operators, no unclear access paths. Digital sovereignty is therefore a measurable operating state, documented in audit reports and certificates that can be presented to supervisory authorities at any time.

Performance for the financial business

Real-time payment processing, AI-based fraud detection, high-frequency trading the financial industry operates in time windows where network latency can become directly business-critical. Geographical proximity is not a convenience feature, but a necessity: a data center nearby delivers structurally better round-trip times than any distant cloud region. In addition, dedicated infrastructure has no “noisy neighbor” problem, which means no latency peaks caused by external workloads and no bandwidth bottlenecks due to oversubscription.

AI in the financial sector

Artificial Intelligence will continue to transform the financial industry. McKinsey estimates that generative AI could generate hundreds of billions of dollars in additional value annually in the banking sector, primarily through productivity improvements in areas such as credit decisioning, compliance and customer communications.

But AI systems in the financial sector are not without their problems. The EU AI Act classifies credit and credit rating models as well as many fraud detection systems as high-risk AI, coupled with strict transparency, documentation and auditing requirements. This is hardly possible in standardized public cloud environments.

Colocation data centers provide the ability to operate dedicated GPU clusters as isolated environments. Training data does not leave the physical boundaries of the data center. The model training is completely traceable and access is checked and logged. This combination: AI performance plus regulatory traceability corresponds exactly to what the AI Act requires and what regulators demand.

Why colocation is the perfect solution for the financial industry

The essence of a local colocation data center is the interplay of control, certification and operational excellence:

Control without operating load. The financial institution owns and controls its hardware, determines access rights and security policies. However, physical operations, power and cooling redundancy, building security and network management are in professional hands. The result is an enterprise-grade infrastructure without the operational risk and capital investment of a dedicated data center.

Compliance documentation that stands up. Colocation providers hold certifications that are incorporated directly into their own compliance documentation and can be presented to BaFin auditors, internal auditors and risk controllers. The result: less testing effort.

Scalability. Whether new AI workload, regulatory capacity increase, or systems integration following an acquisition, additional capacity is available in days or weeks, not quarters. No building application, no board-level discussion required.

Sustainability as a reporting advantage. Under CSRD and EU taxonomy, financial institutions must report the carbon footprint of their IT and the taxonomy compliance of their activities. Modern colocation providers operate their systems with green electricity, use waste heat and provide transparent energy figures. These values can be incorporated directly into ESG reporting.

Connectivity. Modern on-premises colocation sites are typically directly connected to multiple Tier 1 carriers and Internet exchange points. This enables low-latency connections to other financial institutions, to the cloud-on-ramps of leading hyperscalers and to international networks, all under customer control.

Portus Data Centers: Maximum performance, minimum latency

A good example of a modern data center operator is Portus Data Centers Group. Since 2020, the company has been offering high-performance edge colocation services in Germany and neighboring regions, with strategic locations in Hamburg, Munich and Luxembourg. They offer extensive interconnection options that ensure maximum flexibility and scalability.

All Portus Data Centers locations are carrier-neutral and have state-of-the-art security including access controls, video surveillance and 24/7 monitoring. If necessary, additional cages can be implemented. There is also a highly available, redundant energy supply as well as super-efficient cooling systems. In this way, the company enables the operation of powerful IT architectures with low latency exactly where financial service providers need their data.

With ISO27001 certification and additional location-specific awards, Portus Data Centers meets today's stringent requirements for security, compliance and sustainability – to meet the demands of industries such as the financial sector.

Conclusion

If you want to master the balancing act as a financial service provider between AI-driven innovation and ever stricter regulation, you need an infrastructure that can do both: maximum agility and maximum control.

Modern on-premises colocation data centers deliver exactly that: performance for AI workloads, regulatory compliance and network performance for real-time transactions. And all within the safe framework of German and European law.

Source

McKinsey & Company: <https://www.mckinsey.com/industries/financial-services/our-insights/capturing-the-full-value-of-generative-ai-in-banking>