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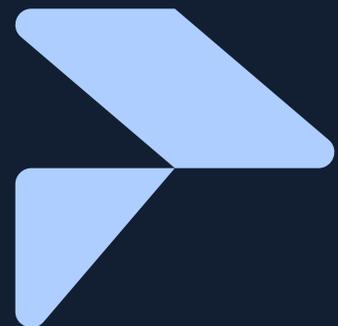
The Future of Data Center Service and Support in a Global Market

A Rehlko *Special Report*

Contents

When acquiring data center elements like HVAC systems or backup power supply, the sale and delivery of the equipment are undoubtedly important factors. However, the presence of a strong after-sales support system is equally crucial to ensure the investment's reliability, longevity, and cost-effectiveness. Ongoing vendor support provides reassurance, reduces downtime, and makes certain that a data center will continue to meet its business goals over time. So, just how seriously should a data center consider after-sales support when purchasing new equipment?

Traditionally, the fastest-growing data center markets coincided with the largest ones, establishing the support network for data center services in these well-established regions. However, recent growth trends seem to be shifting away from exclusively mature data center markets. In response, those providing services to these data centers are facing organizational agility challenges in delivering high-quality local and global services simultaneously.

This special report aims to discuss these topics in depth, addressing the following questions for all data center leaders:

- How is the global data center market evolving, and what potential impact could these changes have on data center services?
- Why are some equipment vendors struggling to provide adequate global data center services?
- What can data centers look for in a vendor to identify strong global data center support capabilities?

We hope that this report will provide context and insight in empowering data centers toward confidently addressing the issue of after sales-support in a quickly changing global business environment.
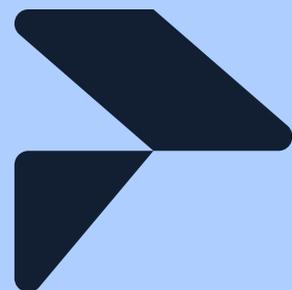
Data Centers as a *Truly Global Industry*

If you could look at a map of the world from the early 1990s and early 2000s that featured pins where most data centers were located, which areas would be the busiest? There'd be big clusters in Silicon Valley and in Northern Virginia. There'd be other bunches in the Dallas-Fort Worth metroplex, Chicagoland, and New York City tri-state area. On a global scale, you'd find some in Frankfurt, London, Amsterdam, Paris, as well as Tokyo.

Fast forward 25 years and not a lot has changed. China and Canada are now in the mix, but by far the world's biggest concentration of data centers remains in North America and Europe. In 2023, out of 8,000 data centers in 110 countries, the vast majority appear in six geographic areas: the United States (33% of total), the UK (5.7%), Germany (5.5%), China (5.2%), Canada (3.3%), and Holland (3.4%). [1]

It's important to recognize that although the most mature data center markets are well-documented, they are no longer the fastest-growing. When Data Centre Magazine listed its top ten emerging data center markets, none were located in Europe or North America.[2]

There is a change in the air. When it comes to the share of population using the internet, North America and Europe are no longer the fastest growing regions.[3] According to a report by Cushman and Wakefield, North America is now the slowest growing data center market. In contrast, Southeast Asia, with Tokyo and Singapore boasting over a half-GW of live power capacity each,[4] leads the pack as the fastest-growing region. Asia-Pacific closely follows suit, where data center investment doubled between 2020 and 2021.[5] There are other global regions showing signs of future prominence, too. Sydney, Australia's data center inventory jumped 30% last year, and is now comparable to the total capacity of Singapore and Tokyo.[6] Meanwhile, Latin America's data data center supply has doubled since 2020,[7] and data center construction in South America is set to expand by nearly 9% annually into 2028.[8] Finally, Africa's data center market is expected to reach $5.4 billion in revenues by 2027.[9]

So, why is this important? Understanding these trends is crucial for data centers because it directly impacts their selection of the right vendors and suppliers to partner with. The big hyperscalers can afford their own solutions, but small and medium-sized data centers account for 62% of the market and depend on service vendors to support them.[10] Traditionally, data centers have been located in Europe and North America, in close proximity to the manufacturers and distributors that supply them. However, many emerging data center markets are now in non-traditional global markets. Are data center service providers prepared to adapt their business strategies to cater to an increasingly international clientele? And, perhaps more importantly, what are the implications for the average data center? As we've seen, the average data center is becoming increasingly farther away from the traditional service infrastructure that can support it. If you're an international data center, how can you know that your vendors and support partners are actually adequately prepared to help, considering their strength has been built by focussing on traditional markets?

Data Centre Magazine:

Top 10 Emerging Global Data Centre Markets

10. Singapore

9. South Africa

8. Vietnam

7. Hong Kong

6. Malaysia

5. Brazil

4. Japan

3. Australia
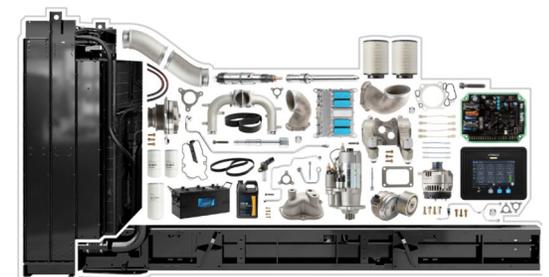
2. Indonesia

1. India

The Vendor *Support Crunch*

The globalization of the data center market places significant demands on vendors to elevate the quality of their services. Their service offerings must now extend farther and, to support this expansion, the structure beneath must become more robust. It's one thing to focus on an initial sale and delivery of a piece of equipment going to a new market halfway around the world, it's another thing to fully support the data center with training, maintenance, emergency service, technical support, and more.

Data center service providers are scaling up to address the globalization trend, and investments in these services — including installation, consulting, repairs, and supplies — are projected to balloon in coming years to respond to market needs. The data center services market, valued at $15 billion in 2022, is expected to nearly quintuple to reach a staggering $70 billion by 2032.[11]

What does all of this mean for the average data center?

Put simply, the average data center is at risk of not being able to receive proper after-sales support, as global vendors struggle to keep up with the challenges of supporting a growing global clientele.

Simply investing money, however, is not an adequate solution to the challenge. There are many obstacles in creating and directing a global support network, and not all vendors are equally equipped for the task. Offering advanced services on a global scale requires the tight integration of a cross-functional internal team, including technical designers, engineers, site project managers, account executives, and more. Moreover, such networks also include the effective management of many different network partners and contractors, such as distributors, technology providers, system integrators, engineers, and consultants. Building these teams and relationships is a monumental effort, and their ongoing management demands substantial resources.[12] Because of the complexity involved, many global support service networks simply do not lead to win-win scenarios.[13]

The reasons many global support networks fail to deliver on their promise are numerous. There are market-related obstacles in dealing with different local business conditions and customer preferences, as well as capability challenges related to the ability to plan and execute services at different scales and environments. For vendors facing these challenges, they need to address their internal technical knowledge, service network management operations, country-by-country service requirements, and their service network interoperability, among other factors.[14]

An evident example of this susceptibility for data centers can be found in the replacement parts supply chain. In 2024 and beyond, manufacturer supply chains for parts and equipment will continue to face many vulnerabilities and hidden risks that are felt by vendors and customers alike.[15] This is very apparent in the data center industry where more than 75% of data center organizations report a recent disruption of some type or another in 2023.[16] This makes exploring supplier abilities to validate their logistics more important than ever, as vendors need to be more flexible and dynamic to remain competitive.[17]

Manufacturers providing global support are responding, putting greater investment into supply chain capabilities. New advancements include rethinking material access and manufacturing footprints,[19] advanced monitoring software,[20] new stocking strategies, [21] and innovative project management methodologies.[22]

While the data center supply chain remains a significant issue at hand, true globalized support goes far beyond just parts delivery. Smart vendors are implementing inventive new strategies to address the heightened need for holistic equipment lifecycle services that offer dedicated expert insight and tailored solutions far beyond the initial commissioning. Data centers must exercise heightened caution in vendor selection to ensure they are at the forefront of after-sales support, or face the consequences.

Reported lead times on some key data center materials[18]

HVAC equipment:
20-30 weeks

Electrical equipment:
40-50 weeks

Doors and hardware:
15-20 weeks

Identifying *Strong Global Support*

When purchasing heavy equipment, it can be easy to become caught up in product features, pricing details, and delivery timelines. Focusing on securing strong after-sales support, though, is crucial in avoiding downtime — after all, preventive maintenance and timely repairs are the key to minimizing disruptions. Moreover, there are financial benefits to be gained: a smoothly-operating and efficient system extends the equipment's lifespan, ultimately reducing the total cost of ownership. Beyond that, with a strong after-sales program, you can reduce the risk of user-related issues, improve safety, and ultimately gain peace of mind. So, how do you know if your after-sales support is robust enough to back your business? What should you look for in a vendor to ensure they can provide globalized support?

Here are some key areas to consider:

Authorized Service Centers

- Are there official service centers in your area?
- Are the technicians in your area trained for your specific brand and model?

Emergency Support

- Does after-sale support include 24/7/365 emergency support?
- Is there a dedicated customer support hotline?

Manuals

- How comprehensive are the documents provided?
- How detailed are the maintenance schedules and troubleshooting guides provided?

Point of Contact

- Is there a service manager in your area?
- Is there a service manager dedicated to your project or business?
- Is your service manager fluent in your preferred business language?
- How is your service manager integrated into a larger global or regional team?
- How is your service manager integrated with leaders and technicians of different functionalities?

Remote Monitoring

- Does the equipment come equipped with remote diagnostic capabilities?
- Does the equipment come with remote alerting capabilities?

Response Time

- What is the expected response time for a service call?

Service Agreements

- Are maintenance contracts offered by the manufacturer or a third-party provider?
- How comprehensive is the maintenance contract?

Spare Parts

- How extensive is the parts inventory?
- How easy is it to obtain spare parts for the equipment?
- How far away are parts stored and distributed?
- Are the parts designed and manufactured specifically for your piece of equipment?
- Does the vendor offer assistance with inventory management?
- Does the vendor offer assistance with lead-time strategy?

Technical Expertise

- What level of technical expertise do the service personnel offer when performing troubleshooting or repairs?
- Are technicians equipped with the latest diagnostic tools?
- Is factory–direct assistance available if necessary?

Upgrades and Updates

- How are software updates and hardware upgrades performed?

User Training

- What kind of training is offered upon delivery of the equipment?
- Are training events or visits available?
- Are preventative maintenance kits provided?

Warranty

- Are different warranty options available?
- How long is the warranty?
- How comprehensive is the warranty for parts and labor?

Rehlko *Service and Support*

You're never too far from Rehlko. With over 800 locations worldwide, we stand ready to provide sales, installation, and aftermarket support services, each offering expertise in power specifications, equipment, and integration. There's no question they can't answer. We personally trained them, after all. Furthermore, should you require assistance in the middle of the night, we've got you covered. Rehlko professionals are available to offer troubleshooting, guidance, service, and support.

The help you need — available anytime.

Spare Parts Hub

Training Center

Service Partner
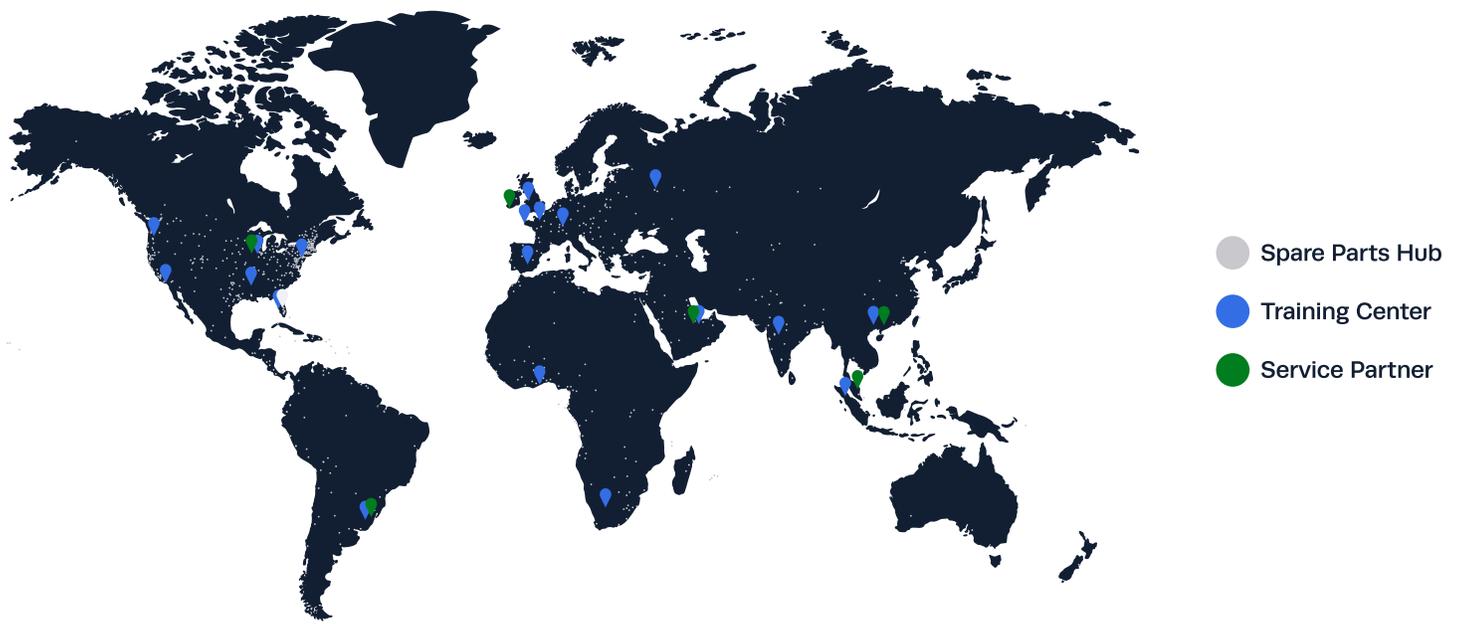
Our Global Reach

800+
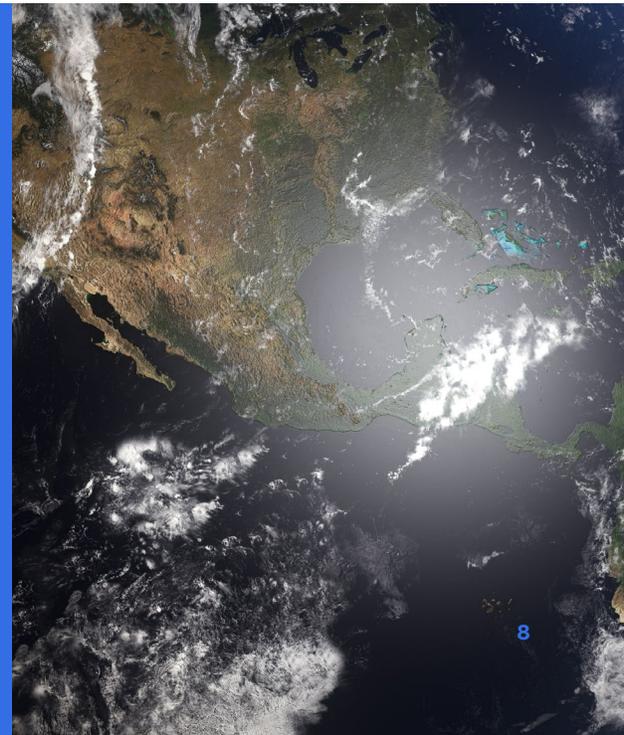Distributors
Worldwide

10,000+
Dealers

18
Manufacturing
Locations

15
Logistics
Hubs

8

Aftermarket *Parts and Service*

Global Network

Worldwide distribution locations providing personal customer support and technical assistance 24/7. Consistent world-class parts and service support in all markets we serve.

Warranty

Rehlko stands by the quality of our products by offering a Standard Warranty and optional Extended Warranty to support your investment. All of our equipment is supported by a global network of certified Rehlko distributor technicians and backed by factory-direct technical support services.

Training

Every Rehlko distributor receives technician certification training with Rehlko factory instructors in training centers located worldwide. Rehlko also hosts training events in Rehlko classrooms and labs, as well as on-site training at distributor or customer locations as needed.

Genuine Parts

Rehlko genuine parts are built specifically for your generator throughout its life cycle and are available when you need them, wherever you are through our global network of distributors. Preventative maintenance kits are available to provide all the parts required to complete scheduled maintenance events.

Generator Tech Support

As a single point of contact, your Rehlko Key Account Service Manager is dedicated to your project. Our factory-trained and -certified technicians are equipped with the knowledge and latest diagnostic tools to keep your generator up and running with quick, accurate resolutions. Factory-direct field service engineers support critical installations and field issues as needed. 24/7 service is available nationwide. And hands-on technical support is available from Rehlko.

Switchgear Tech Support

Switchgear field service provides 24/7 emergency technical support through our distribution partners. Qualified technicians are available to respond at a moment's notice and factory support is available when required. We build lasting relationships, identify potential risks, and mitigate future issues. Our switchgear support team offers:

- Preventative maintenance
- Risk assessments
- Consistent review of system operations
- Proactive equipment upgrades

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About Rehlko

Rehlko stands as a global leader in energy resilience, known for providing backup power essential to data centers uptime. Our solutions empower mission-critical facilities organizations all over the world, enabling a brighter, sustainable future together.

For over a century, Rehlko (formerly Kohler Energy) has met today's energy needs with reliability and foresight, preparing for tomorrow's challenges. As we look to the future, our mission aligns with global priorities: to ensure stability through reliable energy sources and resilient backup systems. At Rehlko, our commitment to innovation is unwavering; we don't just deliver energy solutions – we're helping create an energy-resilient world for a better tomorrow.

Strength, Excellence, and Sustainability: Power Solutions for Every Need

Our robust range of power solutions spans combustion, hybrid, and electrification, built for both indoor and outdoor applications. At Rehlko, we focus on strength and sustainability to get tough jobs done efficiently and responsibly. Through ongoing innovation, we aim to reduce environmental impact while delivering energy resilience.

Integrated Solutions to Keep Your Business Ecosystem Powered

Rehlko's responsive, integrated power systems, including top-tier generators and uninterruptible power systems, ensure that critical facilities like data centers remain operational and worry-free. Our combination of global expertise and localized support means businesses can rely on consistent power solutions tailored to meet unique demands.

Innovation Driven by Insight and Foresight

By leveraging cutting-edge technology and a mission-centered approach, we're constantly exploring solutions to today's energy challenges that anticipate tomorrow's needs. With the aim of sustaining and improving life, Rehlko's teams are dedicated to pushing boundaries toward a sustainable future that's as resilient as it is promising.

To learn more, visit Rehlko.com