

# **SUPPLYFRAME**

# COLOCATION, CROSS CONNECTS, AWS DIRECT CONNECT





Supplyframe chooses CoreSite data centers as the home base for delivering worldwide vertical search engines, supply chain tools and online communities.

### PLUGGED IN



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Aleksandar Bradic, Chief Technology Officer, Supplyframe

### THE CHALLENGE

## Improving electronics product collaboration around the world

Whether it's the latest smartphone or an essential on-board component for a satellite, electronics manufacturing has changed significantly in the last few decades. What used to be mostly a local production process with just a couple of players has evolved into a complex global collaboration with an extensive supply chain, sending manufacturers around the world to seek out Supplyframe for help simplifying their businesses.

Since 2003, the company has provided access to the world's largest collection of vertical search engines, supply chain tools and online communities for the world's leading electronics manufacturers. More than forty thousand businesses and over six million engineers and supply chain professionals worldwide use the company's tools to research, design, build, and procure tomorrow's electronics hardware. But as Supplyframe's customer base and business footprint grew, so did the pressure on its global network infrastructure and operations team dedicated to keeping customers connected.

"Today's electronics manufacturing requires sharing an extraordinary amount of information across time zones, international borders and continents," says Aleksandar Bradic, Supplyframe's Chief Technology Officer (CTO). "With each new product we developed and market we entered, it became increasingly important to make sure our infrastructure was capable of supporting the speed, reliability and security our customers demand."

# AN EVOLVING BUSINESS CREATES NEW OBSTACLES

Supplyframe began as a product quoting service providing a simple online subscription-based option for strategic sourcing, hosted in a local data center. The company turned its attention to building a robust search engine for electronics hardware producers to capitalize on a lack of such industry-specific solutions, eventually moving to a virtual infrastructure through Amazon Web Services (AWS) when the existing data center space was no longer sufficient.

However, search engine platforms consume massive amounts of bandwidth and computing power, which can quickly add significant costs and complexity to a business. "Search engines for things like cars, travel, or real estate might scour five or ten million items at a time," Bradic says. "With electronics that number skyrockets to hundreds of millions of items globally, which substantially increases the speed and power demands on our network."

Bradic says that as much as 30% of the company's user base live in China, with the rest spread across North America and Europe. AWS was an ideal solution for Supplyframe's North American operations and setting up a new zone provided coverage for Western Europe, despite the additional cost. But occasional networking issues and blocked IP addresses in China put many of the company's high-value relationships at stake, demanding an alternative approach.

"Our global footprint means that network latency is a constant obstacle to ensuring instant, reliable data transmission to the farthest reaches of the planet," Bradic says. "Even a minute of downtime or delay could jeopardize a relationship and damage our business. Ultimately, we needed to find a way to regain control over our network and guarantee availability, while also reducing costs."

### THE SOLUTION

After extensive evaluation, Supplyframe relocated its network operations to CoreSite's LA1 data center. According to Bradic, Supplyframe chose CoreSite because of the company's expansive and flexible services, engaged staff, and the facilities' convenient central location for Supplyframe employees. The relationship between Supplyframe and CoreSite later grew with a new production environment deployed into CoreSite's LA2 data center.

"There was a lot of space in our local area to choose from," Bradic says. "Our decision ultimately came down to which partner we felt most comfortable working with and CoreSite provided the best mix of location, pricing, support, and technology."

CoreSite colocation offers flexible configuration which facilitates Supplyframe's simple management and rapid deployment of new servers for its production and development environments. In addition, highly-available dark fiber between the two data centers and the company's home office create a redundant local network with 100% availability, ideal for low-latency data transfers and business continuity.

But a critical component to Supplyframe's infrastructure solution is native access to AWS Direct Connect, a dedicated network connection from the data center into AWS that enables efficient and reliable transfer of large amounts of data.

"One of our primary goals was to reduce latency and optimize transactions with China," Bradic says. "Moving our core operations to CoreSite allows us to appropriately tune for latency and leverage AWS Direct Connect to serve our content to any endpoint over S3 or Glacier without having to worry about bandwidth constraints or excessive costs."

### CUSTOMER EXPERIENCE AND BENEFITS

A seamless transition, improved performance, and unprecedented growth

Selecting a data center partner can be an arduous process, but it's even more challenging when it involves completely reconfiguring a global network infrastructure. Bradic says that partnering with CoreSite made what could have been a challenging migration simple.

"Our deployment was as smooth as we could have hoped, starting with one cabinet and scaling to a few others effortlessly," he says. "Migrating core operations over to a new data center can be a bit nerve racking knowing there could be issues or delays. CoreSite's expert staff made the infrastructure process seamless, transparent, and as easy as possible so we were up and running almost immediately without delays."

A seamless transition to new data centers isn't the only benefit Supplyframe has enjoyed from its relationship. Partnering with CoreSite has helped simplify and streamline the company's infrastructure, slashing monthly costs by up to 20% and bringing much-needed efficiency and reliability to the network. The relationship has also been a boon to new product development, faster iterations and rapid deployments.

Previously, Bradic's team was reluctant to deploy something new because it might require more spending on bandwidth and compute that they couldn't justify. By partnering with a data center, Supplyframe uses its own servers and equipment, so they can test new concepts at their own pace without having to worry about incurring additional costs.

But dollars and cents are just the beginning. According to Bradic, CoreSite gives his team a strategic competitive advantage, "Since moving our operations to CoreSite, we've seen a three-fold reduction in latency across the board," he says. "It has completely unlocked our product and business development process because we can confidently and consistently hit the service level metrics customers demand. Without the flexibility of the data center, we couldn't grow the company like that."

With the successful transition behind him, Bradic is anticipating continued growth—both geographically and in Supplyframe's product portfolio—with CoreSite by his side. "We're planning to standardize our North American data center operations with CoreSite and gain a presence on the East Coast," he says. "From there we'll have a home base to test additional products for prospective customers with stricter compliance standards and hopefully hit on a few of those opportunities. None of that would have been possible without a partner like CoreSite."



### SUPPLYFRAME CASE STUDY AT A GLANCE

#### Challenge

- Relocate operations to a new data center without service interruption
- Reduce network latency and accelerate data sharing worldwide
- Lower operating and infrastructure costs
- Position company for additional expansion

### Solution

- Leverage CoreSite cage colocation for configuration flexibility and easier infrastructure management
- Utilize cross connects and dark fiber to create a high-speed, low-latency local network
- Implement AWS Direct Connect to improve network availability, reduce latency, and increase data transfer speeds to customers and collaborators around the world

#### Results

- Reduced monthly infrastructure costs by as much as 20%
- Decreased network latency three-fold across global operations
- Relocated to a network-dense environment for greater stability, easier management, and guaranteed uptime SLAs
- Improved position for future out-of-market expansion
- Built a high-speed, low-latency local network for business continuity, enhanced communications and to support a low-cost development environment

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### ABOUT SUPPLYFRAME, INC.

Supplyframe is organizing the world of engineering knowledge to help people build better hardware products. The company serves as the industry network for electronics design and manufacturing, providing open and connected access to the world's largest collection of vertical search engines, supply chain tools and online communities. Founded in 2003, Supplyframe employs approximately 100 workers in offices spanning the United States, Europe, and Asia.



