



The Complete Guide to Staff Augmentation for Voice Service Providers



If you're a technology leader at a Voice Service Provider, creating value for your clients by bringing new and innovative services to market is your prime goal. Your engineering team's capacity and skill set largely determine the types of projects you can undertake – but new product development typically falls by the wayside if your staff are busy taking care of routine, day-to-day tasks.

Service providers struggling to overcome this challenge aren't alone; it's a challenge for engineering teams to IT organizations across the technology landscape. A global study uncovered the following:¹

- Engineering teams spend an estimated **44%** of their time on routine work.
- **56%** of tech leaders say their staff is unable to complete everything the business needs.
- Technology personnel workloads are expected to increase by **27%**.

With U.S. Voice Service Provider revenue expected to grow by 20% every year through 2030² meeting your growth and innovation goals can't wait. In this white paper, we're sharing a comprehensive look at staff augmentation: what it is, how it benefits voice service providers when you should consider using it, and how the right staff augmentation provider can help you maintain compliance.



What Is Staff Augmentation?

Staff augmentation is an outsourcing model that allows companies to acquire highly-skilled talent without spending the time or overhead required to hire a new team member. It's a cost-effective method to get the professional skill set needed to support your engineering team on special projects – or everyday operations – without sacrificing quality.

Because staff augmentation is a temporary arrangement, you can bring on new talent short-term or long-term, depending

on your project needs. Staff augmentation is similar to contract staffing, but you don't have to spend time recruiting the outsourced staff, as your provider already has trained professionals at many skill levels on standby to support your team. An established provider should have a deep bench and an extensive program for training engineers and quality assurance alike.

How Does Staff Augmentation Benefit Voice Service Providers?

Staff augmentation offers several benefits to voice service providers, including:

- **Industry-Wide Experience**

A common challenge many service providers face is getting insight into the modern approaches other providers use to solve problems. Staff augmentation can deliver talent with broad experience in designing, deploying, and operating numerous Voice Service Provider projects to offer insight into industry best practices.

- **Access to Top Talent**

If you don't have expert-level engineers on staff to meet project demands or need to onboard specialized help for a specific goal, staff augmentation can save you a lot of time and stress. Instead of recruiting and training new technical hires, staff augmentation enables you to access highly-qualified professionals with the right skills and background almost instantly. Plus, your in-house team members can gain value from working alongside and learning from experts.

- **Staff Projects Faster**

63% of organizations report having an understaffed technical team, and 51% are unable to find people with the right skills³ If you're among the majority struggling to hire and retain technology talent, staffing special projects that support growth and product development is virtually impossible without staff augmentation services. With staff augmentation, you can have an expert team leading your project – or a supporting engineer joining the team – in a matter of days rather than weeks or months.

- **Save on Employment Costs**

Unfortunately, recruiting tech professionals to fill out an understaffed department isn't cheap. **Finding and hiring a technology talent in the U.S. costs \$4700 on average⁴** and

that number only factors in recruitment, selection, and skills training.

Staff augmentation can eliminate these hiring costs by bringing in technical talent with experience working in voice and data service provider organizations like yours. A good staff augmentation provider will ensure their engineers have access to training, industry insights, and advanced knowledge of the standard engineering and operations practices found in Voice Service Providers.

- **Built-In Flexibility**

Staff augmentation allows you to quickly scale your engineering and operations teams' capabilities in response to business needs. For example, if you're rolling out a new service and expect substantial technical support for migrations, staff augmentation can allow you to scale up staff during the peak demand period. Or if you're facing an end-of-year deadline to add a new service and your engineering department doesn't have time to tackle it, you can grow the team temporarily to handle service implementation. In many cases, you won't need added expertise to deploy a new service continuously.

Staff augmentation can help you see substantial savings by scaling your team up on an as-needed basis rather than hiring and training additional onsite staff. **An experienced engineer can accomplish in a month what would take an engineer learning new technology a year to deploy, resulting in \$117,200 or 78% in savings.**⁵

- **Dedicated Support**

Network downtime can be devastating to a Voice Service Provider. The right staff augmentation provider should offer 24/7 support with backup staffing to ensure your network operations face minimal disruption, even if unexpected events occur. And because you have a dedicated team supporting your network, you can be sure they'll have the background to understand your major customers' needs, downtime scheduling, and other critical details unique to your business. That kind of organizational knowledge is simply unavailable when opening a ticket with vendors.

Additionally, staff augmentation offers access to professional support – without Human Resources having to spend time hiring, scheduling, and dealing with other challenges of retaining permanent talent. If you ever need to make a change, your staff augmentation provider should readily adjust the staffing assigned to your team.

- **Voice Service Provider Distinctives**

The right staff augmentation provider will offer professionals who know the difference between enterprise IT and what it takes to be a Voice Service Provider. They know CDRs aren't spreadsheets, E.164 is often the best way to format numbers, and can intuitively grasp origination vs. termination. They can draft a MOP, execute a Maintenance Window, and work with a Change Advisory Board. They believe robocalling is evil, privacy is about Caller ID, and aren't surprised when SIP interop requires modifying headers and SBCs are performing NAT traversal. These aren't ordinary IT skills, but Voice Service Providers aren't ordinary tech organizations.

What Are Typical Uses for Staff Augmentation?

Expert-Level Staff Augmentation

- Data center migration
- Network Architect leading design and new service rollout
- Network Integration post-merger
- Migration from one voice calling platform to another
- Platform upgrade or deployment into a new global region
- Platform outage troubleshooting and solving

Trained-Level Staff Augmentation

- Tier-2 and Tier-3 technical customer support
- New service and feature testing against supported devices and software releases
- Mobile application deployment to Apple and Google app stores
- Management for ticket reporting, tests, and diagnostics
- System patching, such as BroadSoft/BroadWorks/Clearspan updates and OS maintenance

When Should You Consider Staff Augmentation?

Staff augmentation can be especially beneficial if you're tackling a project that demands more than your in-house team can handle, such as rolling out a new service. Since recruiting technical professionals can be an enormous strain on time and resources – especially for staffing a one-off project – **you can leverage staff augmentation services to fill any gaps in capacity or skills without the overhead.**

Other times you might consider staff augmentation include:

- When project deadlines are tighter than your internal staff can meet.
- When the project calls for specialized skills that your team doesn't have.
- When your technology staffing needs change frequently.

Below, we discuss some specific use cases for engineering and operations staff augmentation.

• Migration From Legacy Systems

Experienced staff augmentation providers are well-versed in tackling legacy system replacements. Typically, Voice Service Providers only need expertise in SS7, ISUP, TDM, CAS, GR-303, and ISDN PRI when migrating from older platforms. Engineers from your staff augmentation provider use modern data collection, audit, and testing methods to take arcane tasks off your in-house teams' shoulders, such as replacing, installing, and configuring hardware and migrating data from legacy systems.

• Upgrading and Maintaining Network Cyber Security

Voice Service Providers have unique security needs. Staff augmentation can help your engineering team deploy and maintain more robust cyber security solutions to protect SIP access devices, core call processing servers (including Cisco BroadWorks, Metaswitch, and NetSapiens), and mobile applications. They can also tackle time-sensitive tasks like company-wide OS updates or conduct vulnerability analysis to identify potential concerns in network security. Another way staff augmentation can free up in-house staff for more innovation is by performing ongoing upgrades to remediate cyber security vulnerabilities. **Compared to using internal staff, monthly cybersecurity updates to maintain a Voice Service Provider can bring a savings of nearly 48%.⁶**

• Navigating Mergers and Acquisitions

Staff augmentation professionals can provide the assistance your team needs to conduct M&A due diligence with deep cost awareness and technical insight. You can also leverage staff augmentation to analyze and understand a proposed merger's risks and benefits, including whether it involves moving servers, VMs, databases, or migrating data centers, before completing the transition.

• Tackling Complex Problems

The right staff augmentation provider should have the

experience to help your team troubleshoot or solve even the most complex voice network challenges. Similarly, staff augmentation services can offer expert insight when developing innovative engineering options and ensure your new solution meets regulatory requirements.

• Handling Everyday Technical Work

Not every job requires a network architect, and a staff augmentation provider should provide the right skill level at the right budget level. Critical tasks like testing applications and devices or escalating voice services tickets shouldn't tie up your internal engineering team. The right staff augmentation vendor can provide the expertise needed to handle these, ensuring your technical staff are free to focus on projects that grow your business.

Can Staff Augmentation Ensure Compliance with Telecom Laws?

Meeting regulatory compliance requirements is top-of-mind for many voice service providers, and for good reason. Failure to comply with federal regulations can result in hefty fines and penalties. For example, if a provider deploys a call routing configuration that limits calls to rural destinations, they could be fined **up to \$147,290** by the Federal Communications Commission (FCC).⁷

When compliance is a concern, your staff augmentation provider must have competency in regulated voice technologies. **One Voice Service Provider paid out \$10 million as a result of its incorrectly-designed voice call recording.⁸** An experienced staff augmentation provider can help your organization stay compliant when rolling out new technology solutions or achieve compliance by implementing necessary changes.

ECG specializes in helping voice service providers maintain compliance while still completing critical projects on time. Trust ECG to provide the following and more:

- **Highly-skilled engineers** to help accelerate your new product or service rollout and reduce your time to market.
- **New features and integrations** to expand your service portfolio and offer the latest voice technologies to your customers.
- **The latest cyber security insights**, including mutual TLS and SRTP, secure device management configurations, and zero-trust networking for voice providers.

- **Vendor-agnostic technology** that supports integration with all providers and platforms, including Cisco BroadSoft/BroadWorks/Clearspan, Metaswitch, Oracle Communications, Sansay, Netsapiens, Cisco, Juniper, and Open Source.
- **Support implementing solutions** to increase network reliability and prevent outages, including redundancy, DNS designs, DDoS, and effective testing to detect problems before your customers do.
- **Call recording design and implementation** to ensure compliance with California Consumer Protection and other privacy rules.
- **Comprehensive network management tools** to simplify system management for Cisco BroadSoft/BroadWorks/Clearspan service providers.
- **Robocalling protections** to help you comply with the Robocall Mitigation Program, STIR/SHAKEN, and inbound nuisance calling mitigation.
- **Expert-led training** to help you grow your in-house operations and engineering team's skills.

Augment Your Engineering & Operations Capabilities With ECG

Staff augmentation is ideal for any organization looking for cost-effective access to skilled technical specialists without sacrificing quality. However, staff augmentation isn't a one-size-fits-all solution. If you're considering staff augmentation to supplement your in-house team or help carry out a special project, selecting a provider that can meet your specific needs is critical.

ECG has decades of proven experience building and supporting voice networks for service providers, government agencies, and enterprises worldwide. Our team of engineering experts has the knowledge and expertise needed to support your team, manage technical projects, and help you reach your digital transformation goals.

We can augment your existing staff with our experts to provide these services and more:

- **Deployment Design** - Achieve optimal network performance requirements while meeting QoS standards.
- **Installation** - Get professional support when installing even the most complex voice infrastructure.
- **Patching/Security Maintenance** - Ensure your systems stay patched, updated, and adequately maintained.
- **Migration & Virtualization Projects** - Migrate your data center and move voice workloads to new servers.

Whether you need a dedicated team to install and manage your Cisco BroadSoft/BroadWorks/Clearspan solution, specialists to handle Linux OS administration, or any other critical voice network project, ECG can help. **Contact ECG today** for personalized, vendor-agnostic support to meet your technology goals effectively and efficiently.

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