NOC Outsourcing vs. In-House: Which Is Best For Your Business?

To build, or to outsource, that is the question...

In an era where almost everything can be outsourced to the Cloud, it begs the question of what other services or support systems should be outsourced rather than managed by a company itself. There are definitely pros and cons to outsourcing versus building your own network operations center (NOC). When it comes down to it, each company will have its own set of criteria to help make this determination.

Below, we'll explore some basic considerations that need to be taken when considering whether it makes sense to keep NOC services internal or explore other options such as managed NOC services. It's important to factor in the financial obligations of each of these elements, as well as the logistics. Time is money, so on top of the obvious costs of building and maintaining a NOC, there's also the man-hours that will go into this process from management down to the tech level.

While there are certainly companies who would benefit from an in-house NOC, fully understanding your options and needs could prevent you from spending countless hours and dollars on something that already exists. No need to reinvent the wheel!

Expectations

One of the first things to consider is what the expectations from management and users will be for your NOC. Ask yourself and your team the following questions to determine your NOC expectations:

- *Will you be offering tier 1-3 support, or only taking selective tickets?*
- *Will engineers be needed for some of these problems, or can techs handle everything that will come in?*
- *Does the NOC need to be available 24/7/365 or only during business hours?*
- *Do any systems or applications run outside of business hours that could affect productivity if your NOC isn't available 24/7?*

Fully understanding what your company needs from its NOC will not only ensure you get what you need out of this project, but will also be a large part of determining if you should build or outsource. A 24/7/365 NOC is more expensive to build and maintain; it will also be much harder to staff as you will need assets for every night and holiday.

Support Levels

It's important to identify what type of support your NOC needs to offer in order to meet your user needs. This will drive how your NOC is staffed and be a major factor determining the cost of staffing and feasibility of building over outsourcing.

If your NOC only needs to handle simple tasks like password resets and remote hardware support, then internal techs may be able to handle all of these tickets. These type of employees are usually less expensive and more plentiful. When it comes to building a NOC, these employees would be easier to find, keep, and replace as needed.

On the flip-side, if these are the only types of tickets that will be getting handled, then it would significantly lower the cost of outsourcing. Typically, the determining factor will be the number of users supported. Much like premise-based phone systems, there comes a point where the volume clearly dictates the need to own the solution internally.

As soon as engineers are needed to handle tickets, cost and staffing become more of an issue. Not only will it be more expensive and harder to find the right people, but the user experience also becomes much harder

to manage. The average user struggles with complex problems. So if an engineer is needed to solve the issue, communication problems are more likely to lead to frustration.

Depending on the specificity of your company's tickets, this could be a driving factor in building versus outsourcing. If there aren't many unique issues in your company or industry when it comes to networking and applications, then leveraging an existing NOC with established engineers could make your life much easier. On the flip-side, if you have a number of applications that are specific to your environment, then finding an existing NOC able to support these applications could be difficult and designing an internal NOC might be necessary.

First, identify the tickets your NOC will handle. Using historical data or educated estimates, isolate what percentage of your tickets can be handled by techs, how many can be handled by engineers, and how many can simply be automated. This data, along with knowing *when* your NOC needs to be open and available, will help determine the feasibility of building and staffing versus leveraging an existing NOC solution elsewhere.

Company-Specific Applications

Applications drive the modern business, and understanding which applications are most critical to *your* business is imperative to understanding what your users need from your NOC. Many applications have become ubiquitous enough that they're easily supported by most IT professionals (think Salesforce, G-Suite, Office 365, etc.). These applications shouldn't be a problem for most existing NOCs and shouldn't serve as a determining factor in deciding whether or not to create your own NOC or outsource it.

Things get interesting, though, when you start focusing on applications that are specific to a certain company or industry. For instance, **car dealerships** have DMS (dealer management systems), **medical facilities** have applications ranging from patient file management to imaging, **concrete and construction companies** have distribution and ticketing applications that drive production — every vertical has tools that are specific to them that drive their company's profits.

It's important to identify these unique applications and identify what support levels your users will need when it comes to them. The odds of existing NOCs supporting these specific applications are lower and is something that should be taken into consideration. *Does it make more sense to build a NOC to get around this problem, or to handle tickets for these applications internally and outsource the bulk of user tickets?*

Ultimately, the answer to this question will be driven by the number of users you have, the number of vertical-specific applications, and what percentage of your tickets will be related to these applications.

Facilities

If you plan to manage your own NOC, you will need a physical location. There are many things that go into choosing a location for your NOC. From a high level, you will need somewhere with reliable power (preferably backup power), reliable network connections (preferably diverse and redundant network connections), secure facilities, and close to a source of qualified personnel to staff it. However, finding all of these things in one location can be challenging and expensive. Depending on how you look at it, this need represents a potential company asset (at best) or liability (at worst).

Much like other factors examined in this article, the need for facilities should be taken into consideration but shouldn't be the sole deciding factor. Some questions to ask include:

- *How many personnel will you need at your facility to support your users?*
- *How much equipment will need to be on-site for them to do their job?*
- *What will it cost to acquire and maintain this space?*

If you have enough users and specific applications, then the amount you may be willing to spend here could be significantly higher than if you don't have many users and just need your NOC to monitor WAN circuits.

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Equipment & Licensing

Logistically speaking, your NOC will need hardware and licensing (ticketing and monitoring tools, among others) to get the job done. Not only will there be up-front cost in purchasing this equipment, but there's also expense related to maintenance and support.

- *How many people will be working at your NOC and need desktops, phones, monitors and access to tools and software to get their job done?*
- *What networking hardware will be needed to keep the site secure and offer your NOC personnel a single pane of glass to remotely view and troubleshoot user problems?*
- *What's the average life-span of the hardware and how often will software licensing need to be renewed?*
- *Do you have enough users and industry specific tickets to justify these expenses?*

These expenses can add up quickly and will certainly need to be taken into account if you plan on building your own NOC. When outsourcing, you have zero liability when it comes to hardware and licensing; this becomes the NOC service provider's problem completely.
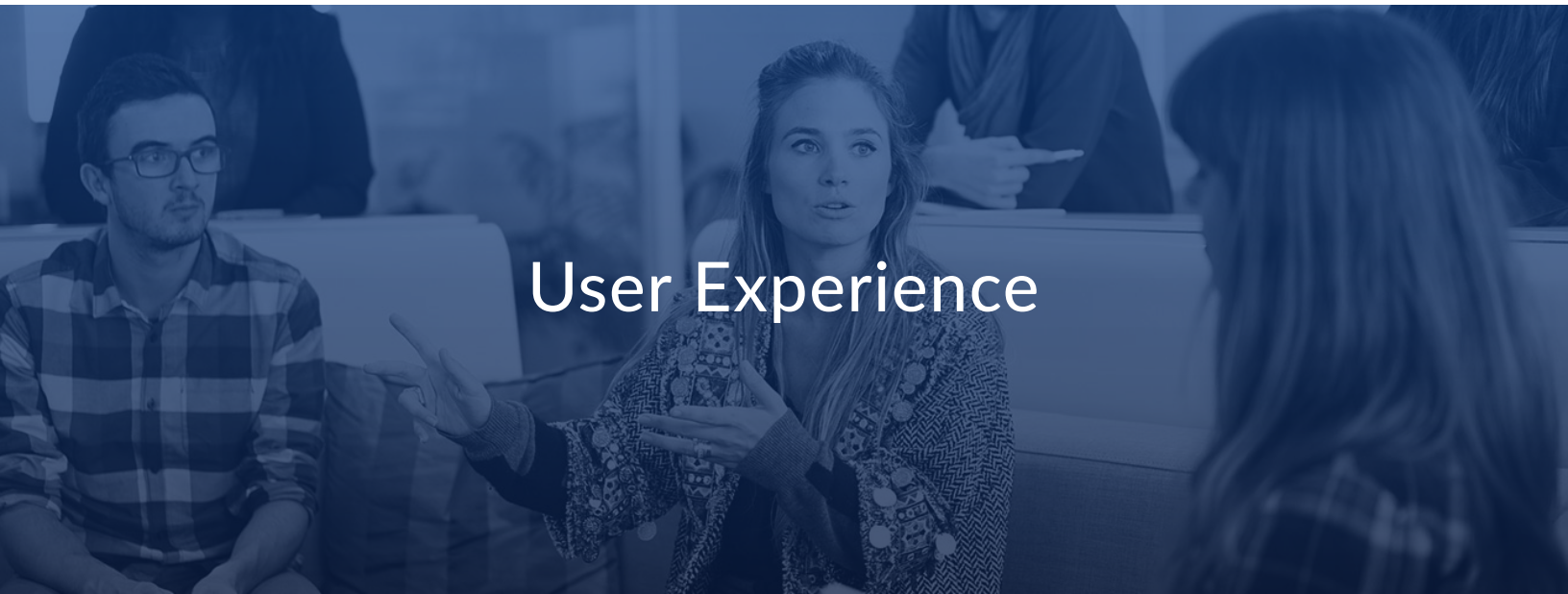
User Experience

Last but not least, one of the most important things to consider is the user experience you want to offer your employees. They need access to technology and applications to do their jobs, and you want them to have to deal with as little frustration as possible. The more in-depth knowledge you have around the types of tickets your users are opening, the better.

If the majority of the tickets being opened are generic or simple requests, then a great user experience should be an attainable goal — whether you decide to build or outsource. Unless your user count gets astronomically high, simple generic tickets almost always point to an outsourced NOC when it comes to cost, user experience and ease.

On the other hand, if the majority of your tickets are related to specific applications and you can't find an existing NOC that supports those tools, then you have to decide whether to handle those tickets internally and outsource the generic tickets *or* build your own managed NOC.

Now, Your Turn

So the question remains: *Should you build and manage your own NOC or outsource?*

This decision isn't an easy one to make, and there's a lot to consider. The money and time that goes into building a fully functioning NOC makes it a daunting task, which is usually best undertaken by companies with a deep IT bench and a large user count. Even large companies often benefit by outsourcing some percentage of their tickets to an existing NOC and handling the others on their own. There are always exceptions though, and there will always be companies that can easily justify owning and supporting their own NOC.

Keeping this in mind, we encourage you to at least explore leveraging outsourced NOC options to handle simple everyday tickets and WAN outages. It doesn't cost a thing to shop around, and you may be surprised by how many man-hours you can free up by removing this burden from your IT team.

About Enable IP

EnableIP is a telecom solutions provider founded by Wired Networks' founder Jeremy Kerth and head engineer Steve Roos after they realized there was a deep market need for helping mid-size businesses establish better uptime rates for their Wide Area Networks (WANs). Armed with the best-in-class carriers and partners, Jeremy and Steve set out with a bold plan: **Guarantee better uptime rates than the industry standard of only 99.5%.**

Their bold plan became a reality. EnableIP's solutions guarantee clients 99.99% (even 99.999%) network uptime. But we don't stop there. Many telecom providers promise high availability network solutions but fail to deliver because they're in the business of providing services, not solutions.

That's the EnableIP difference: We deliver highly available networks by providing a complete system (called "Cloud Assurance") that ensures 99.99% or above uptime.

We deliver this bold promise by:

✔ Owning the entire customer experience. From pricing, contracting, ordering and provisioning to installing, servicing and billing—we do it all! This means no stressful negotiations, confusing setups, or finger pointing if something goes wrong. We actually *deliver* on our promise.

✔ We manage the entire system, and monitor and manage issues as they occur so you can focus on your business—not your network.

The Enable IP solution is like no other. Contact us to get started and experience the difference of a system that truly delivers on its 99.99% network uptime promise.