

Disruption Alert: Our Connected Future Changes How We Buy Infrastructure

By: Mike Nguyen

We live in a highly connected world, and most of us go through our days enjoying the benefits of connectivity without giving much thought to the infrastructure that enables us to communicate instantly, travel safely, shop effortlessly, manage our money, educate and entertain ourselves, secure our homes and our country—or to put it simply, live our lives with all the conveniences of the digital era.



The foundation of our digitally driven culture is internet infrastructure—that is, all the hardware, software and network connections that make the internet work. We may take it for granted, but the reality is, connectivity drives our world, and our future depends on it.

Back in 2005, in his book “*Unraveling Internet Infrastructure*,” J.P. van Best described the internet as “a complex array of telecommunication carriers and Internet service providers (ISPs) with an ever-growing number of hosts, networks, network types, and network exchange points.... This has made it almost impossible to obtain a global overview of the entire Internet infrastructure.”

That was 12 years ago, long before enterprise digital transformation; the expansion of private, hybrid and multi-cloud environments; and IoT, industrial IoT and edge computing. New wireless technologies like 5G will provide the speed and access these technologies demand, and new infrastructure will have to be provisioned and configured to handle processing, storage, and transport for a new order of data magnitude. These are just a few of the burgeoning trends that are exponentially expanding the demand for network, colocation and other hosting services.

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That growth is already happening. The market for internet infrastructure is big and getting bigger. The portion of the industry my company focuses on—procurement and contract management—is all by itself a \$350 billion segment and growing.

An Industry Primed for Digital Disruption

The internet has made it possible for us to go online and book or buy real estate, hotel rooms, airline seats, insurance, mortgages, even used cars. Consider how much the internet has transformed those industries and the irony becomes clear: buying internet infrastructure on the internet—with the notable exception of public cloud services—is still nonexistent.

A technical professional (a CTO, director of engineering, VP of infrastructure, etc.) looking for infrastructure services has to use a tedious and ridiculously time-consuming manual process to find the colo, networking, and IP transit services he or she needs.

We'll examine why they need to buy these services in a moment, but for now, let's look a bit more closely at the process they must follow in order to buy. They ask, "Which services do I need to solve my problem? Who offers those services? Is it available when I need it? What will it cost me? And, most importantly, where can I find the accurate, actionable data needed to make these crucial decisions?" Typically, this entails multiple calls to multiple service providers who each describe their services using different terminology—even within the same company. This leaves the buyer with apples-to-baseballs comparisons and a flood of return calls and emails from sales reps.

It's just the way the industry has always worked. In 2017, we've seen it start to change. In 2018, that change will become rapid, dramatic, and disruptive.

Case Study: A Growing Internet-based Startup

Let's take, for example, the conundrum faced by most internet-based startups. These companies provide services via applications delivered over the internet, and they are striving to become the Facebook, Google, or Netflix of their respective industries. Typically, these companies are led by technical founders who drive product development and engineering. They start out using public cloud services like Amazon Web Services (AWS), Google Compute and Microsoft Azure, and after successfully finding product and market fit, growth accelerates, as does demand. This drives an urgent need for network, compute and storage resources to better fit their needs. They need to augment their public cloud deployments with traditional data center, network and related services to reduce cost, increase network and technical performance, and satisfy compliance and regulatory requirements.

These companies generally lack experience in internet infrastructure. This makes sense, as their expertise is in product development, software engineering and marketing, not vendor sourcing and management. While confronting rising demand and growth outstripping their technical capabilities, they also face exponentially increasing costs, the need to locate in new geographies, and deal with performance constraints associated with their public cloud vendors.

Often, on the cusp of an opportunity for game-changing growth, these startups find themselves blindsided by runaway and unsustainable charges from their public cloud provider and at a loss for where to go next.

"Success brings many challenges to successful startups," [said Chris Fanini, co-founder and CTO of Weebly](#). "One of those challenges is the need to add our own infrastructure resources to our existing public cloud resources. Buying our own infrastructure is incredibly difficult when compared to the ease of buying public cloud capacity."

On the flip side are the sellers, the traditional service providers—ranging from large telecom companies with tens of billions of dollars in revenues (such as AT&T, NTT, Equinix and Comcast) to smaller, regional providers. There are literally hundreds of providers offering thousands of services; finding them online, much less transacting with them online, is very difficult. All of these providers would love for their customers to be able to buy their services as easily as they can purchase public cloud services—transparently, online, and with minimal sales interactions.

The internet infrastructure marketplace is in dire need of digital disruption, and change is coming. In 2018, we'll see the inflection point.

2018: The Inflection Point for Infrastructure Procurement

Until now, buyers of internet infrastructure essentially had two choices: fumble through the manual and time-consuming search and procurement process on their own, or hire a consultant to assist them.

In the past year or so, some companies have attempted to ease the burden by offering dashboards and portals designed to help buyers organize their thinking about the problem they have. This is a step in the right direction. Unfortunately, these tools have proven insufficient. Some are plagued with less-than-comprehensive or outdated data. And, frankly, some are little more than thinly veiled lead-generation schemes.

But other solutions are focused beyond this, and 2018 will see the launch of internet-based search and procurement platforms that use the data collected from users and service providers to provide value to both sides of the market. Soon, buyers and sellers will get what they want: accurate, relevant data and the ability to transact online. We'll soon see in the internet infrastructure industry the same kind of transformation that occurred in the travel industry when online platforms such as Kayak, Orbitz, Travelocity and Priceline disrupted it.

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What does this mean for service providers? It means the way you reach your customers is changing. The industry will transform, shifting from a consultant or direct sales-based approach to an automated, online one. You'll need to open your data and processes to third-party, online platforms. The good news is, this approach will help you reach many more customers and establish direct relationships with them. In all respects, this means a brighter future for the internet infrastructure industry.