10 QUESTIONS TO ASK

BEFORE YOU BUY

FIBER INTERNET

FOR YOUR BUSINESS

INTERNET CONNECTIVITY

Internet connectivity delivered over fiber optics is widely considered to represent the future of broadband connectivity. Today, with more and more businesses moving servers to the cloud, and with big data tools and media archive file sizes demanding more rapid uploads and downloads than ever before, bandwidth bottlenecks are common. As a result, many businesses simply can’t wait for public agencies to install fiber. Instead, many are contracting with commercial carriers for services.

There are many companies that offer fiber setup services, and plenty of information available online about the various particulars and logistics involved with procurement, which can make the decision-making process a bit daunting.

It is a good idea to familiarize yourself with the fundamental principles at play before trying to make a buying decision. You need to know how connectivity delivered over fiber will allow you to stay ahead of your competition while serving the data needs of your team and customers. Of course, getting the best value for your company is a significant portion of that decision.

The following ten questions will give you the information you need to make the best decision for your business.

HOW MUCH DOES IT COST ?

1. HOW MUCH DOES IT COST ?

You might think that the DSL and cable connections that are common to homeowners might be less expensive than a dedicated fiber connection, but in almost every case, this is untrue. These communications providers maintain enormous networks with hardware and infrastructure costs that need to work off of the phone company's local loop.

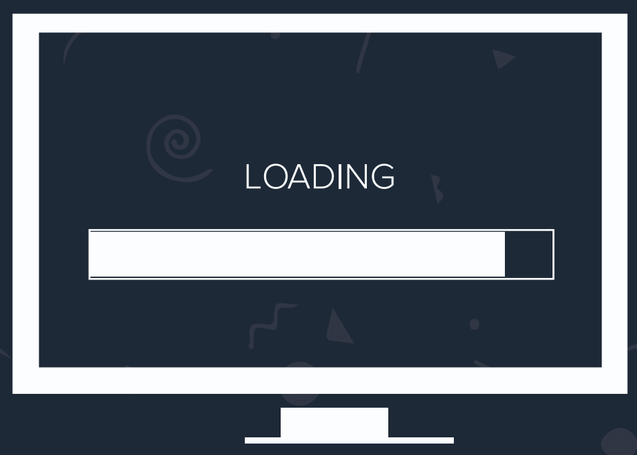
When you buy your own fiber connection, you bypass the need to integrate with the masses, which makes for lighter costs and higher speed value. With fiber, your money goes towards your bandwidth and no one else's. The lion's share of the costs involved with fiber are directly related to the initial installation, so the longer you have it, the more cost effective it becomes. Moreover, if there's already a fiber line running near your location, your installation costs will be far lower.

HOW FAST IS FIBER REALLY ?

2. HOW FAST IS FIBER REALLY?

It’s super fast. Fiber uses light to transmit data, which means that theoretically, you’ll be able to process uploads and downloads at the speed of light. Practically speaking, of course, that speed is limited by the electronics at each end of the circuit. Whereas T-1 and DSL circuits typically transmit at 1.5 Mbps and 6 Mbps, respectively, when you use fiber, you’re transmitting at least at 10 Mbps. If you opt for Fast Ethernet, you’ll have access to 100 Mbps, and with Gigabit Ethernet, you can connect at 1000 Mbps.

Once you’re connected via fiber, your speed will be limited only by the electronics that sit at the end of the line – with the right circuitry, you can even reach 100 GigE.



HOW MUCH BANDWIDTH WILL WE GET?

3. HOW MUCH BANDWIDTH WILL WE GET ?

With your own fiber, your office will be able to handle additional bandwidth as you need. With your data going through a fiber connection, your provider can ramp up your bandwidth by modifying the settings on your equipment, without having to install any circuits or other new equipment.

If your Ethernet port can accommodate 10/100/1000 Mbps, you'll be able to increase your service within that range. At 10, 50, or 100 Mbps intervals, you will no longer have to worry about bogging down the network.

HOW WILL FIBER CONNECT TO OUR DATA CENTER?

4. HOW WILL FIBER CONNECT TO OUR DATA CENTER?

When you use a service provider’s circuit, speed to the WAN (wide area network) often reaches a bottleneck, which often means you’re stuck keeping your servers local. But with circuits connected via fiber, you’ll have many options for accessing remote servers. Fiber supports speeds of 50, 100, or 1000 Mbps, so you’ll be able to sync with the cloud easily. You’ll also be able to trim your redundancies and enable access for remote users. Keeping your storage within your LAN (local area network) will quickly become an outdated requirement.

WHAT IF WE WANT TO USE WIFI?

5. WHAT IF WE WANT TO USE WIFI ?

As long as your router can handle the gigabit speeds, you will not experience much of a slowdown when connecting wirelessly. Adding WiFi capability by introducing a wireless access point to your LAN is extremely straightforward for offices connected to the internet via fiber. Likewise, relegating those who use WiFi to a DMZ (a “demilitarized zone”) should have limited impact on performance, thanks to the speeds you’ll get with fiber.

TELL ME ABOUT ANY HIDDEN CHARGES

6. TELL ME ABOUT ANY HIDDEN CHARGES

Your bill will include a charge for the port and a charge for the bandwidth. Rest assured – these two amounts are your only service charges. Your taxes will vary, though, depending on whether your circuit crosses state lines, and whether you have voice service as well.

TELL ME ABOUT THE CONTRACT. ARE WE LOCKED IN?

7. TELL ME ABOUT THE CONTRACT. ARE WE LOCKED IN?

Contract terms typically involve commitments of 12 months minimum, just to give your service provider a chance to recover the cost of delivering fiber. Note that if fiber access is already present in your building, you should have little wait time, and your installation timeline will likely be short.

OUR COMPUTERS ARE OLDER. CAN WE TAKE ADVANTAGE OF FIBER SPEEDS TOO?

8. OUR COMPUTERS ARE OLDER. CAN WE TAKE ADVANTAGE OF FIBER SPEEDS TOO ?

You are in luck. Because Ethernet connections have been the standard for LAN infrastructure for some time now, even older standard business networking equipment should be able to handle super fast speeds when connecting via fiber. Moreover, using fiber means that you'll have access to the MAN (Metro Area Network) via Ethernet as well.

HOW CAN WE INTRODUCE FIBER TO OUR BUILDING?

9. HOW CAN WE INTRODUCE FIBER TO OUR BUILDING ?

Contact your property manager, and request approval to install fiber. Then check with a local ISP (Internet Service Provider) to inquire about their fiber availability. Tools like WiredScore and FiberLocator will help you figure out how close fiber is to your building already, which can help you determine the scope of work you'll be facing to extend it to your location. Also, keep in mind that if you don't yet have a signed lease for your office space, you might want to stipulate that fiber will be available on site as a condition of the contract.

WILL WE NEED A BACKUP SYSTEM?

10. WILL WE NEED A BACKUP SYSTEM ?

When it comes to any type of technology, you always need a backup system, with the hopes that you'll never need to access it. An intermodal option, such as service delivered over copper or wireless, can provide you with the kind of redundancy you want, making sure you're covered in the event of unexpected circumstances. You can also make use of redundant fiber entry paths to your building if they are in place.

CONCLUSION

The process of deciding whether or not your company needs fiber internet access is tough, and there are plenty of considerations that are specific to your business. By understanding the basic concepts that go into the decision, though, you'll be in great shape to help all of the stakeholders at your company to decide which solution provides the best value for its necessary investment.

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