The Business Case for Diversifying Broadband Access

INTRODUCTION

Today, one-third of small and medium sized businesses extensively use Web technologies.* With today's growing need for bandwidth, small and medium-sized enterprises (SMEs) are faced with two competing pressures -- cost versus reliability. And, depending on your business requirements for uptime, your industry and the size of your organization, you may decide on one over the other, or a combination of the two broadband options available today.

"We ask our customers what is their threshold for a complete outage and the answer we hear is they can't survive any blip in coverage. If you can't afford any downtime, the cost to have network redundancy is a cost well spent."

Darren Mass
CEO MASS Communications

design

implement

support

MASS Communications

Each form of connectivity brings its own unique brand of benefits to business users, so how do you know which approach is best for you?

That's where a telecom industry expert like MASS Communications comes in – to help separate marketing hype from actual business value of broadband in a shared or dedicated environment. MASS's team understands that both have their place, especially as growing broadband demands and user requirements drive the need for a diversity strategy to ensure businesses remain connected -- no matter what.

That's an imperative today given that Internet-related consumption, if measured as a sector, now exceeds agriculture or energy, according to an analysis by McKinsey Global Institute, the research arm of global management firm McKinsey & Company. The study also found that SMEs that utilize the internet get a 10% boost in productivity, while those firms that heavily use web technologies grow and export at twice the rate of companies that don't leverage the internet.

Given the importance of the internet as a driver for businesses, SME decision makers need to know the differences between dedicated and broadband connectivity.   Review the chart on the following page.

*Statistic source: the World Bank, 2009; Gartner, 2010; Eurostat, 2010; and a McKinsey & Company Internet survey of more than 4,800 small and medium-sized enterprises.

When disaster strikes...

Hurricane Sandy led to $50 billion in losses alone*

are you ready?

Diversification Helps Law Firm Recover from Hurricane Sandy

Natural and manmade disasters can happen at any time. Unfortunately, interruptions to voice and data services can cripple a business. Seeger Weiss LLP, a 70-person New York-based class action law firm, couldn't agree more. Back in 2012, Seeger Weiss had recently moved into new office space on Water Street in Manhattan. While the firm had a disaster recovery plan in place, it wasn't prepared for the severity or the long-term outages caused by Super Storm Sandy.

Like most companies in New York City, Seeger Weiss relied on Verizon for their voice and data services. The storm took out Verizon's infrastructure after flooding overwhelmed all of downtown Manhattan.

MASS Communications helped the law firm get back online within 48 hours. Seeger Weiss had MASS work with a cable provider to restore data connectivity. MASS also transferred all of the law firm's New York numbers to Seeger Weiss's Newark location, which became the new temporary headquarters.

Having a diversity strategy that includes both dedicated and broadband backup turned out to be a necessity for Seeger Weiss. While redundancy requires a little more investment per month, it can more than pay for itself in the event of a disaster.

*SOURCES:
 NFIB Small Business Poll, Gartner & IDC

Broadband	vs	Dedicated
Connectivity delivered to your premise on the same connections as your TV cable. It's an asymmetrical service where you get a faster download speed than upload on a shared platform among all the other neighboring businesses or consumers in a small geographic footprint.		Connectivity delivered on a dedicated pipe designed for one business at a time. Users enjoy symmetrical bandwidth service – that is, both the upload and download speeds are the same, and you are not sharing that same bandwidth with neighbors.

Questions to Ask

Questions every business should ask before deploying a connectivity solution include:

- **How much down time can I afford?**
- **How many employees do I need to have service for?**
- **What type of industry am I in?**
- **What kind of connectivity do I need?**
- **How critical is connectivity to my environment?**
- **Am I connecting multiple offices?**
- **Do I need encryption or any specific security on my network externally or internally?**
- **Do I need a specific amount of bandwidth?**
- **Do I need symmetrical upload and download speeds?**

Depending on how you answer these questions will help determine what connectivity strategy would work best.

When to Choose Broadband and Dedicated Links

When would a strictly broadband solution work for a user? Broadband is suitable if your enterprise is comprised of small offices of just a couple of employees and you need to connect to the internet with as much speed as you can get at lowest cost. If you have remote offices, or remote workers and you do not rely 100% upon connectivity to run your business, broadband may be ideal. If you don't mind occasional service quality issues or slight outages, a broadband offering is a low cost solution to connect to the internet.

MASS considers broadband as an attractive backup option for SMEs to use as a failover in a worse-case scenario such as what occurred with its client, Seeger Weiss, a New York law firm following the devastation of Hurricane Sandy in the fall of 2012 (see sidebar).

When should an enterprise look seriously at a dedicated service? When you know that any downtime is unacceptable. A dedicated link comes with service level agreements (SLAs), or a guarantee of bandwidth. If there are any issues with the circuit or the quality, the provider will pay you for the outage and will work quickly to resolve your service issue.

Dedicated links, while more costly, bring with them the assurance that your issue will be resolved with a dispatched service call, testing and vetting.

Dedicated connectivity also is ideal if you want to interconnect with a virtual private network such as an MPLS (Multi-Protocol Label Switching) network, an increasingly popular network option because it allows enterprises to connect one or more offices to each other as if they were right next door. Broadband users have much more limited VPN options – they can use an IP-based VPN – but not a traditional VPN like MPLS.

Know Your Connectivity Requirements

While larger organizations tend to embrace dedicated links; size doesn't always matter. For instance, MASS services several video editing companies that may have a small headcount of one to 10 employees in an office. However, video editing requires substantial amounts of bandwidth that cannot be supplied via a broadband provider. They use a dedicated service to support the upload speeds and performance their content demands.

Cloud Computing - Sweet Spot for Dedicated Links

Clearly, SMEs continue to rely increasingly on broadband access, especially as they move moremission-critical applications to the cloud. The move to the cloud has prompted 47% of enterprises to upgrade their network bandwidth, according to a recent study by Forrester Consulting conducted on behalf of XO Communications and Juniper Networks. The same study found that 75 percent of enterprises are using or plan to use some type of cloud-based services.

These findings are not surprising to MASS, which is seeing customer demands for upload capabilities higher than ever before. Enterprises are sending large amounts of data or posting them to shared drives. Today, most broadband providers are unable to exceed 20 Mpbs for upload, which may not be sufficient for a cloud environment. Organizations relying heavily on cloud storage/cloud servers will need more upload speed will require a faster, more dedicated service that can deliver both upload and download at the same speeds..

Diversity with Broadband - Your Insurance Policy

In a world where the unexpected can happen and inevitably does, MASS recommends companies embrace a diversity strategy. After all, it's best to be prepared for uncertainties than to find yourself without any means to communicate with clients.

Why do we buy life insurance? It's definitely not in hopes that we have to use it, but it's there if it's needed.

The same philosophy applies to a dedicated/ broadband combination – it's there as an insurance policy in case you need it.

MASS, in working with clients around the U.S., has seen repeatedly how quickly things can happen that can affect a business's uptime – steam pipes exploding under busy downtown streets; buildings experiencing power outages; cars hitting light poles and power lines; people unplugging things they shouldn't.

Conclusion

To conclude, enterprises must carefully weigh the merits of broadband and dedicated internet access based on their specific operational and business requirements. They should do their homework up front, weighing the pros and cons of both approaches in the context of how critical uptime is for their business. Keep in mind that not all connectivity is created equal. In the telecom industry, you absolutely get what you pay for – cost is a big factor in quality. A diversity approach remains the strongest option for organizations that view the internet as mission-critical to their livelihood and ability to grow.

For more information about MASS Communications' solutions and diversification approaches for enterprises of all sizes, visit www.masscommgroup.com.

If you like our white paper, you'll love our products.