



I D C T E C H N O L O G Y S P O T L I G H T

Making the Right Broadband Choice for Your Business

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Adapted from *Market Analysis Perspective: U.S. SMB Telecom, Broadband, and Video, 2016* by Matt Davis, IDC #US41722216

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Small and medium-sized businesses (SMBs) in the United States rely on broadband-enabled internet services to provide a communications path to their customers and employees. This Technology Spotlight is designed to help small business owners, managers, and IT decision makers gain a better understanding of the options they have for broadband services, why broadband services are important for different situations, and key considerations when choosing a broadband service.

Introduction: The Importance of Quality Connectivity

In the United States, small business owners depend upon broadband-enabled internet services to provide a communications path to their customers and employees. Whether over a fixed or mobile broadband service, the data traveling over the network connection needs to be securely transmitted and stored. Broadband service forms the foundation of information access and communication that is the lifeblood of any company — large or small. All businesses — from the smallest sole proprietorship to national companies with remote offices and regional hubs — have similar IT and communications needs, albeit at different price points, complexity, and scale. These universal business needs include the ability to back up and store important documents, to securely and privately exchange information, and to communicate seamlessly and effectively through a networking connection accessible from any location.

Small companies share many of the same business goals as their larger corporate peers but are limited in the resources they have to realize these goals. Fortunately, the services to address these needs are evolving and improving: Voice is moving to the cloud, social media is now a critical advertising and customer outreach platform, and cloud storage and backup is cheaper and easier to access. The list goes on, and the foundation is fast, reliable broadband connectivity.

Connectivity Options

With all the different broadband technologies available in the market today, small business owners can have a difficult time deciding which broadband package is right for them. Unfortunately, there is no clear-cut answer to this question. The default decision many businesses make is that "faster is better," and there is some truth to this logic. This line of thinking leads small businesses to subscribe to the fastest (and often the most expensive) broadband service they can afford. However, this is not necessarily the smartest choice. IDC believes that small businesses should assess their broadband needs by looking at the number of active users in their office.

Broadband capacity is typically supplied by a single connection and then shared using a wired or wireless local area network. The more users on the network, the more bandwidth is required. The type of internet activity taking place on a network is also important. If the main uses are services such as simple email, file transfers, and web browsing, a small business can typically utilize a less

robust broadband service. However, if the business is using high-bandwidth video-centric services or uploading or downloading very large files, faster is definitely better.

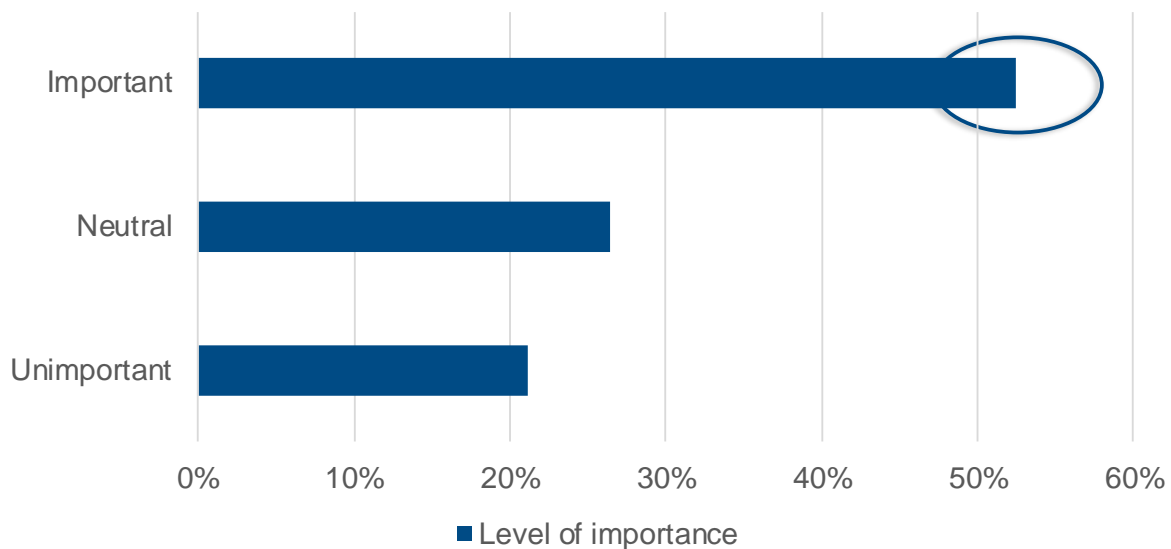
Reliability is also a concern. Services such as cable modem and DSL have proven to be very fast and dependable, but they do not meet the high standards of a managed circuit guaranteed by the service provider. This guaranteed level of service comes at a higher cost, but it is monitored more closely and is generally more reliable. These services range from dedicated internet access services aimed at small businesses to enterprise-grade carrier Ethernet services that have high levels of service guarantees and very fast speeds as well as pricing beyond the budget of the typical small business.

Over the past few years, service providers have deployed bonded dedicated internet access services and fiber-based services that offer very fast broadband speeds and a higher level of consistency and reliability when delivering network-based services. These in turn provide a firm foundation for cloud-based services, advanced IP-enabled voice services, security, storage, collaboration (in particular videoconferencing), access to IP VPN capabilities, and the ability to dynamically provision different levels of bandwidth speed using Ethernet technology.

The primary benefits can be seen when a need exists for flexible bandwidth that is as fast on the upload as it is on the download and is capable of providing both high quality of service (QoS) and superior network security. This combination would be optimal for a company that uses videoconferencing services, requires fast "downstream" and "upstream" data streaming, and must be consistent with very low network latency and, perhaps most importantly, highly secure. Other use cases include companies operating in the medical industry that rely on symmetric bandwidth when sending large medical records and images such as x-rays. Another example might involve real estate companies that provide virtual tours or are uploading high-definition images of properties for sale. These services have traditionally targeted the larger enterprise market, but IDC recently has seen a greater focus on the SMB market by vendors. IDC survey data shows that over half of small businesses with fewer than 50 employees describe symmetric bandwidth as being important (see Figure 1).

FIGURE 1

Upstream Bandwidth Importance



Source: IDC's *SMB Telecom, Broadband, and Video Survey Series 2016*

Benefits

Fast, secure, reliable broadband not only is critical for business success but also is the foundation for applications from simple email to advanced unified communications tools. While the majority of larger businesses have dedicated IT professionals on staff, according to IDC's survey data, less than half of small businesses surveyed had a full-time IT professional. Predictably, smaller companies are more resource constrained. Increasingly, these businesses are looking for a service provider that supplies basic access and can help solve business challenges while offering a wide arrange of broadband-enabled services.

Gigabit speed, advanced security, high QoS, and the ability to monitor the network and the applications running over it have long been considered attributes of the largest enterprises. However, IDC believes the rapid move into cloud and hosted services is a game-changer. Best effort cable modem and DSL services will be sufficient for most SMBs; that changes when security is a primary consideration. In this case, there is a big difference between the requirements of a small financial office and a hair salon or auto shop. In the same vein, from a QoS perspective, latency and network availability are absolutely critical for a medical establishment that provides live diagnostics or other medical services. It is clear that as latency-sensitive applications requiring high speeds, rock-solid security, and QoS take hold, dedicated internet access services will become increasingly important.

The ability to stay constantly connected to the web has changed the way U.S. consumers work, live, and shop. Mobile networks that enable a full-featured internet experience have rapidly become supplemented with WiFi services that are increasingly available and inexpensive. The seamless handoff from mobile networks that have data usage limits to WiFi-connected broadband networks that are faster and offer unlimited data usage has propelled WiFi usage to new levels. SMBs interested in keeping up with how people live and work now and in the future should consider intercompany and public-facing WiFi services to be among their most important technology initiatives.

Considering Windstream

In late 2015, Windstream announced a network upgrade initiative called Project Excel. The initiative focuses on providing faster, more reliable broadband offerings to customers, including small businesses. Project Excel puts a greater emphasis on fiber closer to the customer's business location, whether extending fiber to the business location or extending fiber close to the business and using the latest DSL technology. This initiative will achieve speeds of up to 75Mbps — almost a tenfold improvement over older DSL technology.

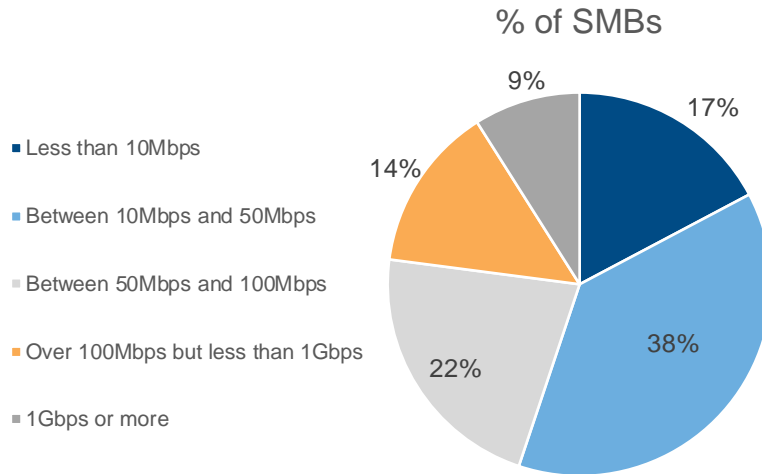
Windstream reports that by the end of 2016, almost 90% of its customer base will be able to receive a minimum of 10Mbps, with more than half receiving 25Mbps or more. However, Windstream is focused on the 50Mbps to 100Mbps tier, where it plans to service over 30% of its addressable market by the end of 2016.

According to extensive survey work conducted by IDC over the past decade, the majority of small businesses are looking for speed tiers shown in Figure 2.

FIGURE 2

How Much Broadband Speed Will Satisfy SMBs?

Q. How much broadband speed do you think your company needs to satisfy its business requirements?



n = 504 U.S. SMB IT/communications decision makers or influencers

Source: IDC's *SMB Emerging Services Survey*, 2016

Windstream's product portfolio maps to small business broadband requirements. DSL upgrades are the foundation and will be the go-to service for most small businesses. Windstream's portfolio roughly divides into two categories: managed and unmanaged.

Unmanaged broadband is similar to what might be experienced at home. It is usually an asymmetric service, meaning that internet connectivity is faster downstream and slower upstream. This is the way most cable modem and DSL services are offered. Depending on the location, Windstream has services ranging from 10Mbps/1Mbps to 100Mbps/4Mbps, and in limited markets 300Mbps/20Mbps to 1Gbps/1Gbps. These services come with professional installation and 24 x 7 customer support, but they are not "managed services" in the same way that Windstream's other data products are supported. Of course, these services are less expensive and generally have faster download speeds at the expense of faster upload speeds.

Managed services include dedicated internet access (DIA) and Ethernet services, which are generally more expensive. However, they offer symmetric bandwidth (the same amount of speed both upstream and downstream), a higher level of ongoing performance monitoring, and service-level agreements to ensure this level of performance is delivered consistently. Dedicated internet services start at 10Mbps/10Mbps and extend up to 40Mbps/40Mbps.

Challenges

The number 1 challenge small businesses face when making a decision about data connectivity is choosing the right broadband tier. Often, small business owners and managers don't really know how much bandwidth they use or need, and they automatically default to the highest downstream speed service that is within their budget — typically ignoring upstream services when making their decision. Assessing your business' real bandwidth needs — upstream and downstream — is a difficult but worthwhile exercise.

Another key challenge is the availability of choices in some locations, particularly rural geographies. This is a difficult challenge for any service provider because, in general, the farther the customer location is from the nearest point of broadband technology, the slower the broadband service. This issue can be partially offset by making sure that the connection point is fed by fiber. While service providers can't do much about the distance issue, they can make sure they invest in the network connecting the broadband technology to the larger network connecting to the internet. Windstream has made this commitment.

Recommendations for Small Businesses

For SMB owners thinking about exploring their service options, IDC offers the following recommendations:

- When evaluating broadband services, think about what your company does online and subscribe accordingly. In addition, keep in mind that speed is just one aspect; reliability will grow in importance as services move to the cloud.
- For small businesses assessing lower-priced services, it is important to know that DSL is an evolving technology. The difference between the early DSL offerings and DSL offerings that are capable today of delivering high-definition video and speeds approaching 100Mbps is significant.
- If your company does not have its broadband bundled with other services, now is the time to take a good look around. There are cost savings and operational efficiencies that can make your company's broadband subscription easier to manage and less expensive.

Conclusion

IDC estimates that more than 80% of SMBs rely upon basic access technologies such as DSL and cable modem. While these services continue to get faster and become more reliable and are well-suited to most business requirements, there are times when a more advanced business connectivity service becomes important. Just as a business would be wasting money by renting a warehouse to store a few boxes of inventory, paying too much for ultra-fast broadband is also a mistake. Yet trying to make do with the cheapest service when your business needs clearly demand a higher level of service will ultimately hurt productivity and cost you money. Taking an honest look at your business' broadband needs, as well as the applications that your company actually uses, is the key to getting this decision right.

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