



2024 Buyer's Guide to Business Connectivity



Fiber Driven. People Powered.

Top Trends in Business Connectivity

Confronting Challenges, Dispelling Myths, and Designing the Future

Staying connected has never mattered more. Business leaders are facing connectivity obstacles and opportunities at a breakneck pace. A misstep can mean costly disruptions and missed opportunities. It's more than just staying online — it's about securing your company's position now and in the future.

The path forward? Recognizing the challenges, dispelling prevalent misconceptions, and adopting the right solutions. In what follows, we share the latest connectivity trends to help you make informed, strategic decisions about your network solutions.

The Modern Connectivity Challenges

The importance of connectivity becomes undeniably clear the more applications and users increase. While technologies promise opportunities and efficiency, they also carry a set of unique challenges. For mid-market companies, ensuring seamless operations means understanding and mitigating these connectivity hurdles.

- **Afternoon Productivity Loss:** It's not an urban myth; many businesses indeed experience a palpable drop in bandwidth around 3pm, precisely when local schools let out. This phenomenon underscores a larger issue — the limitations of shared internet access. When much of the community goes online simultaneously, the available bandwidth gets stretched thin, affecting business operations and potentially compromising client interactions.
- **Data Demands and Business Continuity:** With more businesses relying heavily on technologies like AI, augmented reality, and video calls, there is greater data consumption. Moreover, unexpected spikes in data usage — from things like viral marketing campaigns or a sudden influx of user activity — highlight the inadequacy of older internet setups. And with the business ecosystem becoming so data-driven, any internet disruptions can have profound consequences, including lost revenue, reputational damage, and decreased customer trust.
- **Hidden Costs:** Asymmetrical bandwidth might look good in terms of cost at first glance. But in practice, it can cause unexpected internet slowdowns that disrupt work. This discrepancy between promised and actual bandwidth can lead to longer meetings, delayed data transfer, and other general inefficiencies. Over time, these minor inconveniences compound, hurting work productivity and the bottom line.
- **The Pitfalls of Legacy Infrastructure:** Using old technology can increase security risks. Legacy systems often lack the latest security features, and the data packets aren't as secure, making them easier to access.

The Misconceptions

Misleading promotions and other misconceptions can hinder progress, leading to inefficient resource allocation. Breaking through these myths is paramount to achieving true digital empowerment.

- **"Best Effort" Fallacy:** Many internet service providers use the term "best effort," making it sound like businesses always get the best possible services. But in reality, "best effort" can fall woefully short of their requirements, especially during peak demand periods. Dedicated capacity, on the other hand, promises consistent service, tailored to the company's needs, eliminating unpleasant surprises.

- **Cloud Misconceptions:** Cloud solutions, with their ease of access and deployment, have gained significant traction in recent years. But, like any tool, they're not free from drawbacks. Some companies think using only the cloud is the best way to go. But while initial setups might seem affordable, costs can quickly spiral as data storage and access requirements grow. Therefore, it becomes crucial to strike a balance between cloud deployments (public and private) and traditional data centers, to get the best results and manage cost. Every company's requirements are different, which makes it even more important to have a connectivity partner who understands how to work with you on your cloud strategy and align bandwidth accordingly.
- **"True Diversity":** It might seem like having diverse network offerings would make things more stable. But with all the recent consolidation, is your network really diverse?. Sometimes when carriers merge (or one acquires another), they end up grooming the network, put simply: they combine them to get rid of redundancies. This can go against the diversity customers were going for in the first place. Further complicating matters when M&A is the effect of reduced competition. As providers consolidate, businesses might witness escalating prices coupled with deteriorating service quality, which are an unwanted side effects of less competition.

The Path Forward: Rethinking Connectivity

As operations become deeply intertwined with technology, businesses need a fresh approach to connectivity that aligns with their evolving needs and promises enhanced productivity.

- **Dedicated Internet Access (DIA):** Traditional shared connections, while seemingly cost-effective, often suffer from fluctuations influenced by external variables. Consider the neighborhood kid streaming 4K videos right when your business is hosting a crucial virtual meeting. DIA fixes this. Allocating specific bandwidth exclusively for a business buffers operations from such external influences, promising consistent speed and stability even during peak demand hours.
- **Symmetrical Speeds:** It's not enough for businesses to have high download speeds; their upload speeds must keep pace. This is especially relevant in tasks like video conferencing, where data is both sent and received simultaneously. Symmetrical internet recognizes this need, ensuring that upload speeds mirror download ones, so everything runs smoothly and without any delays.
- **Enhanced Uptime:** Downtime, no matter how brief, can ripple into significant operational setbacks and financial losses. Given the heavy reliance on digital tools and platforms, businesses cannot afford these disruptions. Uptime, therefore, isn't a luxury — it's a necessity. Investing in infrastructure that pledges superior uptime goes a long way in ensuring consistent productivity and maintaining positive customer relations.
- **Strategic Partnerships:** Understanding all the ins and outs of connectivity can be tough for IT teams already fully tasked. That's why the expertise and insights of knowledgeable (and reachable!) providers can be invaluable. By forging partnerships with providers who prioritize a consultative, customer-centric approach, businesses can get a clearer picture of their connectivity needs and right-size their bandwidth.

Conterra: Leading the Way With Fiber-Driven Excellence

With a **fiber-driven, people-powered approach**, Conterra delivers secure, dedicated internet access, offering businesses the reliability and symmetrical speeds they need. By prioritizing actual over advertised speeds and consistently improving our fiber infrastructure, we are committed to ensuring businesses remain connected, productive, and ready for whatever's next.

The Hidden Cost of “Regular” Internet for Modern Enterprises

The internet is the heartbeat of business operations. But, just as with heartbeats, there are strong pulses and weak ones. Your choice of internet connection can make the difference between a thriving business and one that’s merely surviving.

Broadband: The Shared Pipe Dilemma

Most companies initially rely on broadband as their primary digital gateway —a shared pipe, promising certain download and upload speeds. However, those speeds, often advertised as peak performance metrics, can be misleading. They are optimal rates achieved under perfect conditions (which never really exist). The shared nature of broadband means actual speeds can fluctuate, particularly during high-traffic times. The reality? **The connectivity your business receives almost never matches what you thought you were paying for.**

The Real Cost of Asymmetrical Bandwidth

Where data-driven decisions and cloud-based tools are fundamental, both upload and download speeds become essential. Regular broadband often offers slower upload speeds than download speeds, known as ‘asymmetrical bandwidth.’ This discrepancy can lead to:

- **Lost Productivity:** Slower upload speeds can affect video conferences, file uploads, cloud backups, data syncs, and more.
- **Compromised Customer Experience:** Delayed response times can frustrate customers, leading to churn.
- **Employee Frustration:** Waiting for files to upload, dealing with slow applications, fighting through glitchy meetings (or dropped calls) all impact morale and efficiency.
- **Operational Delays:** Every minute spent waiting for systems and data is a minute lost in potential revenue, productivity or innovation.

Calculating the Business Impact

Before diving into the specifics, it’s essential to grasp the overarching equation:

Cost of Downtime (per hour) =



Employee Costs

+



Lost Sales

+



Tech Support Costs

Let’s break this down with a hypothetical example. Consider a business with annual revenue of \$15 million, equating to approximately \$1.25 million monthly. If we assume 20 business days in a month, this translates to a daily revenue of \$62,500.

Calculating the Business Impact (cont.)

Employee Cost per Hour:

With 150 employees at an average of \$40/hour, the total employee cost per hour is \$6,000.

Lost Sales:

To calculate hourly sales revenue, take $\$62,500 \div 8 \text{ hours} = \$7,812.50$.

Tech Support Cost for Downtime:

We'll estimate this at \$100/hour for the sake of our example.

Using the equation we started with, for just one hour of downtime:

Cost of Downtime (per hour) =



\$6,000 (Employee Costs)

+



\$7,812.50 (Lost Sales)

+

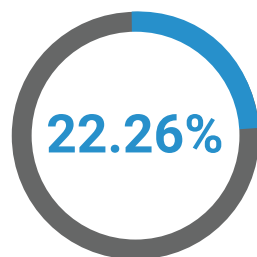


\$100 (Tech Support Costs)

= \$13,912.50

That means for a mere 60 minutes of downtime, your losses could shoot up to approximately \$13,912.50. That's 22.26% of your daily sales gone! Extend that to a 2-hour downtime, and the losses double, nearly encroaching on half of your daily earnings.

And the ripples don't stop there. The direct costs illustrated above don't even factor in potential long-term losses stemming from eroded customer trust and loyalty. According to a recent Forbes¹ article, **47% of users won't wait longer than two seconds for a website to load**. Even more concerning, **40% will abandon a site if it takes more than three seconds**. The business repercussions of a poor digital experience? Slow-loading websites, often a consequence of poor upload speeds, potentially cost businesses a staggering **\$2.6 billion in lost sales each year**.



**of daily sales are lost
in 1 hour of downtime**

Connectivity in Focus

From making clear video and VoIP calls and analyzing data in real-time to using cloud tools smoothly, businesses need their internet to be rock solid. When those connections falter, the losses from standard broadband can quickly overshadow any upfront savings.

As digital reliance grows, so does the demand for dedicated capacity. Terms like "best effort" when it comes to connectivity should be approached with caution. For businesses truly looking to capitalize on their network investment and get better performance, quality, dedicated Internet connections are essential.

Facing this reality, businesses realize they can't gamble with the inconsistencies of shared broadband. Each momentary lapse, no matter how brief, chips away at revenue and erodes hard-earned trust. The difference between success and stagnation could very well be the quality of your internet connection.

About Conterra

If you're looking for a network provider that aligns with the highest industry standards, consider Conterra. Our focus on service, innovation and reliability means that your business remains connected and competitive.

¹ https://www.forbes.com/advisor/business/software/website-statistics/#sources_section

What to Expect From Your Network Provider

People who say bandwidth is just a commodity are, frankly, all wrong. The right provider has to deliver so much more than just high speed and low cost. The stakes are high and the criteria are broad. This checklist will guide you through the right questions to ask and ensure you select not just a provider but a true partner in meeting your business objectives.

Network Features and Performance	Provider Responses
How can I choose the initial bandwidth I need?	
How quickly can I scale my bandwidth if I need to?	
What is your network's fail-over time?	
Does your service offer diversity and redundancy? Please provide documentation.	
Does your network use the latest optical and packet technologies?	

Support and Team Expertise	
How long has your team been in the industry, and are they locally based?	
How responsive is your support team in case of issues?	
What is your customer service philosophy?	
What are your escalation procedures?	
Are account executives knowledgeable and willing to work collaboratively on custom solutions?	
How often will my account rep change?	
What is my access to technical and engineering expertise?	

Service Level and Reliability	Provider Responses
Describe your Service Level Agreement (SLA) in detail, especially in case of non-compliance.	
What is your track record for service reliability?	
Can you provide statistics and references?	
What outages have you had in the past year?	
What is your MTTR?	

Network Strategy and Investment	
What investments are you making in your network that will benefit my business in the near future?	
What is your product roadmap 3-5 years out?	
How do you plan to adapt to growing technology demands and changing market trends?	

Transparency and Ownership	
Do you own your fiber or do you lease it?	
How does this affect flexibility and troubleshooting?	
Is any part of the service provided by a third party?	
If so, what impact could this have on my business?	
How are you connected to data centers, and can you provide detailed information about routing/ diversity options?	

If you're looking for a network provider with the highest industry standards who will keep the needs of your individual business always in mind, consider Conterra. Our focus on service, innovation, and reliability means that your business remains connected, secure, and competitive.

Reach out to Conterra today for a bandwidth solution that meets your needs and exceeds your expectations.



Conterra.com | 1-888-266-4836