



Advisory Report

# Why Managed WAN Services for SMBs Fail (and How Carriers Have Helped Them Succeed)



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## ■ Issue

When managed wide area network (WAN) services first emerged in 1989-1991, they were initially custom-built services for Fortune 100 firms in the form of massive, carrier-administered frame relay networks. The waves of change that followed – the commercial Internet, telecom competition, increasingly sophisticated and then converged services on IP – widely popularized business data services, even as it made data networking more complicated. Enterprise customers that have the budget and in-house talent have been able to adapt and benefit in various ways from the telecom revolution. But for small- to medium-sized businesses (SMBs) without the finances or in-house expertise, managing and maintaining their networks can be a struggle.

For telecom service providers, the SMB market looks like a natural selling opportunity for managed WAN services. If SMBs can off-load responsibility for configuring, managing and maintaining the network to their carrier, it would be one less distraction from these companies' core business. But the SMB segment faces a different set of challenges from enterprises, centered around constrained resources, which makes it particularly difficult for carriers to get their foot in the door with standalone managed services. A couple of false starts have shown that what hasn't worked, namely enterprise-level managed WAN services that are repackaged with less functionality and poor customer support to shave down the price. There are, however, ways that carriers have found to build and package their services that address SMB needs, and get around some of the market segment's restrictions.

## ■ Current Perspective

Managed WAN services are a collection of value-adds that cover customers' wide area networks and equipment deployed at the customer point of demarcation. These services can include monitoring and reports on service metrics; maintaining network security; and

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assuming responsibility and control of customer premises equipment on the client's behalf. For enterprises, managed WAN is part of a vast palette of carrier professional and managed services that can provide strategic assistance at any point in the lifecycle of a service, from initial assessments through day-to-day operations. These customers can quantify the value of off-loading network management: The numbers become more favorable as more services converge on IP, making the IP link more versatile and complex. One large U.S. carrier reports take rates at or above 40% for some level of managed network services for enterprises that move onto its network-hosted IP-VPNs.

SMBs face a fundamentally different situation. These companies tend to have fewer than 100 employees (small business), or fewer than 500 employees (medium business). These companies have just one or a few business locations, and typically use Internet or IP-VPN services across leased lines and broadband connections. SMBs tend to have a fundamentally different perspective from enterprise-class customers. These businesses tend to:

- Operate with constrained budgets;
- Buy off-the-shelf services rather than negotiate contracts with sales representatives;
- Have a small internal IT staff, and may lack in-house expertise in areas such as telecom services; and
- Supplement in-house IT with outside solutions providers such as consultants and value-added resellers (VARs).

On the surface, the SMB segment might look like a strong prospect for managed network services. But these companies lean toward treating communications services as an expense to try and reduce, instead of a strategic asset for investment. SMBs also tend to have simpler,

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more static networks to maintain, and many may not have the financial clout to purchase and install the equipment, software and professional services that might move them to a higher level of purchasing carrier services. Simpler network needs, a desire to drive down costs and low budgets for big-ticket projects are some big snags that make re-packaged enterprise-level managed WAN services unsuitable for most smaller businesses. Carriers that have tried scaling down enterprise-level managed WAN services can miss the mark even further by stripping out costs such as premium customer service and support.

For carriers to be successful in providing managed services for SMBs, they need to address a number of business hurdles first. Some areas that carriers can address to woo SMBs include:

- Providing equipment and creative ways to finance customer migration and upgrades;
- Helping customers comprehensively in all aspects of the service cutover;
- Extending managed services support beyond networking, into IT assistance; and
- Offering a streamlined, automated customer portal for self-monitoring and troubleshooting.

PAETEC provides one example of a relative newcomer to managed WAN services that has worked to fit its offers to medium-size businesses. The PAETEC Online customer portal covers the necessary basics of customer self-service, such as viewing outage information and trouble tickets, tracking and analyzing services in use, adding and changing features of subscribed services, and bill viewing and payment. The carrier added a premium network monitoring service in 2007, added managed router services in early 2008 and followed up

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with managed CPE firewall service (to complement its network-hosted firewall service) later in 2008. PAETEC offers a standard three tiers of managed WAN services, but those tiers start with handling router configuration for the customer; add full management support; and end with a top tier that includes direct notifications from PAETEC engineers from inside the carrier’s network operations center (NOC).

PAETEC does not match AT&T or Verizon Business for managed WAN options, but its services are comprehensive for the mid-market’s needs: managed router tiers; IP firewalls that handle unified threat management, intrusion prevention, URL filtering, IP-VPNs and demilitarized zone (DMZ) features; and network diversity, disaster recovery and remote storage options for business continuity. Equally important is PAETEC’s “Equipment for Services” (EFS) program, which supplies companies with funding to buy discounted equipment and software through PAETEC, which the customer may need to take full advantage of the carrier’s services.

DeltaCom demonstrates another way to build entire solution sets around network and managed services with its Simpli-Business service. DeltaCom Simpli-Business sets up SMBs with a complete combination of telephone system, computers, printers, networking and support, drawing on the CLEC’s relationship with NEC (telephone systems), Lexmark (printers) and Lenovo (laptop and tower desktop computers). The carrier handles installation and training, PC migration, on-site hardware support and remote maintenance for its equipment, and unlimited live help desk assistance. The cost of the equipment is contained in a three-year service contract, after which the customer can either engage DeltaCom in a technology refresh, or lower the costs of its monthly bills. In addition to supplying the networking portions of the service (through integrated access services such as DeltaCom Simpli-T), the carrier also can bundle remote storage services. Aside from its Simpli-Business packages, DeltaCom is a solutions provider offering equipment supply, maintenance and troubleshooting that includes telephone systems, IP gear and videoconferencing systems. Simpli-Business gives SMBs the option to outsource their IT and telecom infrastructure and focus on their core business; at the same time, any customer entering a Simpli-Business arrangement will remain closely tied to DeltaCom for all their service and support needs. The model can be particularly attractive to businesses with limited capital that can pay off equipment over the length of the service contract, with predictable monthly payments and no costly surprises from equipment failures.

Aside from DeltaCom’s complete outsourcing example, many service providers are exploring ways to help SMBs turn their voice and data networks into more of a plug & play experience – making installation easier, and making ongoing operations and maintenance headaches go away. One more recent example is AT&T’s Business in a Box, geared to small businesses and branch offices with less than 50 employees. For the service, the carrier deploys AT&T-branded CPE that includes a built-in router, switched wired Ethernet with power over Ethernet support, WiFi and Managed Internet Service bundled with a VoIP package that supports analog telephone ports, premises-based telephone systems or network-hosted VoIP. AT&T monitors the service for the customer, and is responsible for device management and maintenance. The service also includes rudimentary security, in the form of built-in firewall and IP-VPN capability.

AT&T Business in a Box serves several purposes: First, it gives SMBs a way to offload all networking issues to their service provider; second, AT&T gets its own branded CPE end-point device at the customer’s business location; and third, the service adds tangible value to T1 leased line service, which SMBs may find pricey if they compare dollars-to-bandwidth



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against the cost of cable providers' multi-line voice/broadband bundles. Managed network services have the potential to crack the SMB market – but service providers aiming to serve the space appear to succeed better when they can wrap together IT and networking, addressing them as one set of challenges for SMBs. The SMB space relies heavily on solutions providers, such as VARs and consultants. Project-based outsourced IT/networking assistance is a big-ticket item for SMBs, and these companies will be interested in any service provider alternative that can sidestep these costs. But solutions providers are often also channel partners for telco services. A service provider that decides to sell IT equipment/service packages along with network design, installation, support and management can run afoul with its channel partners. The same can happen to telcos that supply equipment and wrap the cost into customers' service contracts. Channel partners make their living off network, IT and software recommendations, assessment, design, configuration and installation on behalf of their customers. Depending on the types of agent and channel partners they have fostered, service providers expanding into IT equipment and support need to proceed with caution.

**Recommended Actions****Recommended Vendor Actions**

- Carriers that target the SMB space should avoid the temptation to offer a stripped down enterprise managed WAN package and assigning a lower price tag. IT and networking issues are often wrapped together for SMBs. If a service provider can save a company from up-front, IT-related costs through a package of services, that can be a compelling selling point.
- Altogether, carriers should have a sort of ecosystem of packaged services they can deploy to help SMBs. The types of components that can catch this segment's interest include: managed router services and managed firewall services, or versatile CPE incorporating these and other functions; network redundancy with premium service guarantees, and online backup service; remote help desk and on-site dispatch for assistance; a set of simple, low-engagement professional services (e.g., inside wiring projects); on-boarding assistance; and financing to help the customer buy equipment and software to build infrastructure that requires managed WAN services.
- Whether or not a carrier is packaging managed WAN services to SMBs, it requires a streamlined, automated customer portal so SMB customers can perform basic monitoring and troubleshooting on their own. Internal network automation should ultimately save the service provider money, in the form of fewer direct calls into customer service and support.
- Service providers do not need to get into the IT business themselves in order to be effective in bundling IT/managed services, telecom and managed WAN services for the SMB space. AT&T, for example, earlier in 2008 launched AT&T Tech Support 360, a comprehensive support program for small businesses, using a third-party service partner. Smaller providers can rely on solutions partners for assistance, or can even build communities of interest (e.g., New Edge Networks' Retail Broadband Alliance) and let SMBs pick their own preferred IT, software and service partners from the list.
- Large incumbent carriers in the SMB managed WAN space need to pay attention to providing these smaller businesses with a premium customer service and support experience, preferably with dedicated agents. Companies that entrust their operations to the telco will not have the patience to be bounced around to general agents when something goes wrong. The incumbents can draw on their comprehensive field force and extensive in-company

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expertise to support the SMB space.

- Smaller, newer competitors can stress personalized focus and quality customer service, preferably quantifying the claim with service goals (e.g., 90% of calls answered within one minute). They can package services specifically for the SMB space – and point out this fact – rather than trying to maintain different sets of approaches and practices for larger enterprise-class customers and smaller SMB clients. What smaller competitors may lack in a direct field force and comprehensive portfolio, they can make up with solutions partners that fill in the service gaps.

**Recommended User Actions**

- SMBs should not hesitate to shop around service providers to see what sorts of packages they can make available. They should be willing to entertain solutions that propose the telco take over the CPE (i.e., router) at the point of demarcation, as well as solutions that take responsibility for other premises equipment (e.g., LAN, telephone system, printers/copiers, servers and desktop PCs).
- Even SMBs that have a whiz IT department can benefit from managed solutions. A service provider can provide round-the-clock support backed by service level guarantees; employees need time off (and pager notifications at 3 am get old fast). In terms of cost-benefit analysis, the SMB needs to consider the return on investment from freeing its IT talent by taking it mostly off the technical support hook, and reallocating the time toward building and supporting applications for the core business.
- SMBs should note that IT and telecom managed and support services is a two-way street. Traditional telecom carriers and new competitors are adding to their on-premises support, and they tend to have a field force that can help provide on-site help (even just break/fix replacement) that can be invaluable. At the same time, solutions providers and IT consultants don't just resell telecom services, some of them have gotten into the network monitoring business, to provide virtual IT support around-the-clock for their customers.

