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WHITE PAPER

State of the SMB Wireless Network: Multiple Options for Managed WLAN Wins Business

Abstract

The small business Wi-Fi market is growing rapidly and offers a big opportunity for MSPs with more than 28 million companies as prospects. Small businesses that choose to outsource WLAN management often unknowingly pony up for high-priced network solutions that exceed their needs. In large part, this is due to managed services providers (MSPs) that are pre-dispositioned to offer solely enterprise solutions on the menu. These types of solutions fit the needs of the MSP, but not necessarily their SMB clientele.

In offering the same solution to every client, these MSPs achieve across-the-board hardware standardization, essentially applying an enterprise model of service to a mosaic of individual SMB clients. The high licensing costs associated with enterprise solutions, like Cisco Meraki, makes serving SMBs a low margin endeavor on a per-client basis. To turn a profit serving SMBs, a provider often must monitor 50, 60, up to 100 or more WLANs. That is changing.

The emergence of new lower-cost hardware and licensing models has strong potential to disrupt the big-or-bust model of serviced WLAN. We are starting to witness forward-thinking MSPs service the SMB space with more cost-effective, and environmentally appropriate, solutions. These fit client networks more accurately, impose lower costs for the servicer, and fare well for the cost-conscious SMB.

This paper lays out a model of business wherein MSPs serve fewer clients and achieve better profit margins. Offering appropriately scaled, niche-specific WLAN solutions is the essential element to consider.

Key Takeaways

- Wireless in the office is more important now than ever before—data indicates that certain verticals, starting with healthcare, have great need for the latest equipment.
- The SMB is very likely to outsource WLAN management to an outside vendor, who often services SMB clients with enterprise-grade solutions—not for the benefit of their SMB client, but for their own convenience.
- The only way for a MSP to service SMBs with enterprise-grade solutions and remain profitable are to service many clients (50, 60, 100+) – this is problematic both for SMBs and new MSPs, who are hunting for alternative solutions for WLAN.
- Business-class equipment provides the necessary go-between for this set of customers. Data shows that MSPs want performance most of all – new business-class WLAN gear delivers proper performance specifications and manageability features.
- Forward-thinking MSPs offer Linksys as inexpensive-but-viable 'enterprise alternatives' that cost-conscious SMBs appreciate—giving rise to a new way for MSPs to win businesses in this competitive space.

New Demands and Old Equipment Don't Mix

In a historical context, a small company adopting the latest technology proves paradoxical. On one hand new tech creates a competitive advantage that SMBs leverage against the industry establishment. On the other hand, cutting-edge solutions are expensive so adoption may occur slowly for companies focused on bottom line expenses.

For WLAN management it ultimately becomes a question of industry. What type of work most benefits from wireless network performance, security, and reliability? To add a finer point, which industries will not allow companies to operate without a modern WLAN?

Wireless is moving to 802.11ac Wave 2

The impending obsolescence of the IEEE 802.11n wireless standard is troublesome for late WLAN technology adopters. According to a December 2016 report by IDC, the equipment operating on the latest 802.11ac standard accounts for 67.1% of dependent access point unit shipments and 80.9% of dependent access point revenues. These adoption rates signal obsolescence for legacy equipment using the 802.11n standard.

Today, manufacturers of wireless devices design products for the 802.11ac standard. IEEE standards are backwards compatible, but older WLAN infrastructure cannot manage wireless devices as intended. Companies that recognize the benefits of 802.11ac equipment likely have it in place already.

ADVANTAGES OF 11AC

- Supports more devices on a WLAN
- Provides greater bandwidth to endpoints
- Offers more granular control for prioritizing bandwidth

Too many devices, too little bandwidth

Ten to 12 years ago, employees and their BYOD ("bring your own device") expectations drove demand for infrastructure updates for businesses of all sizes. More devices, more complexity, more range—BYOD practically gave birth to the MSP because businesses found value in turning over network management to a third party. Today, it's the Internet of Things and smart devices that present a similar challenge for businesses and their wireless networks.

"The role of the Internet of Things, digital transformation, cloud, 3D printing, and robotics combined with cognitive systems are creating new channels of investment directed at SMBs," IDC analyst Carla La Croce reports in characterizing the WLAN space. "One of the main priorities for vendors is to design a strategy to better target the SMB segment."

Data collected in a recent survey by Linksys and ChannelPro Magazine provides confirmation that MSPs sense the opportunity as well.

MSPs in a position to monetize but need hardware that fits

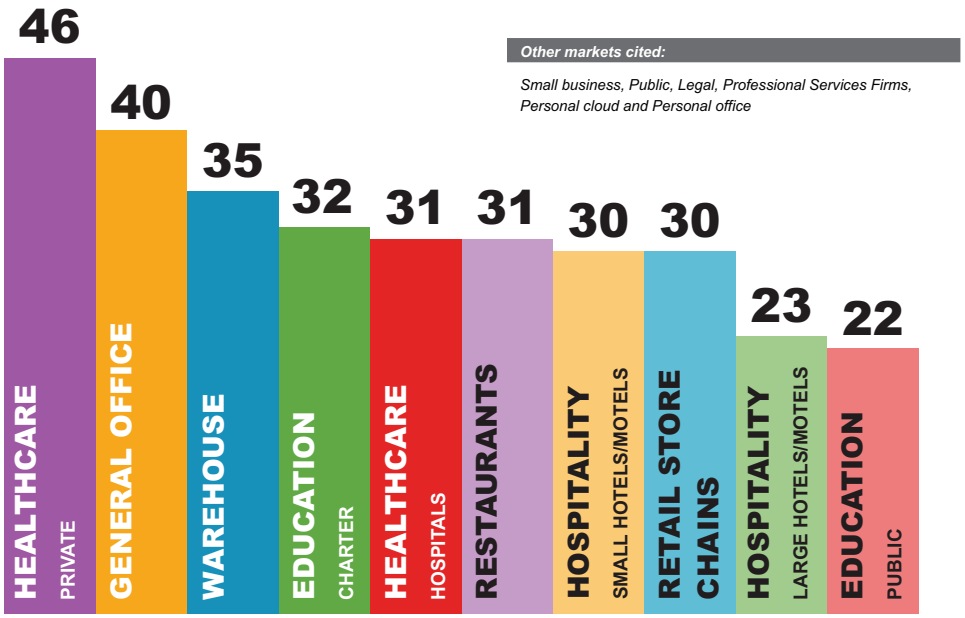
There is money to be made in helping SMBs get their wireless up to speed. How will this happen profitably? In which industries should MSPs build niche expertise? Is the only way to deliver WLAN solutions involve pushing high-cost licensing models onto small businesses looking for a way to compete?

ChannelPro Magazine polled 70+ channel IT professionals to assess the landscape of SMB Wi-Fi. The research revealed that MSPs sense this opportunity and are starting to move away from the standard "enterprise for all" model of WLAN-as-a-service to smaller client networks.

Small-office healthcare has the greatest need

It is not surprising that MSPs sense an opportunity to sell new hardware to small healthcare practices more than any other vertical. Wearables, implants, skin sensors, home monitoring tools, and mHealth applications—these devices are changing the practice, but require a supremely reliable and secure WLAN to support functionality and ensure data security under HIPAA and other regulatory privacy laws.

What verticals do MSPs see the biggest areas of growth* in the small business networking market?



*Represents total number of survey respondents. Respondents were able to select more than one vertical.

Small practices with complex WLAN needs

Regardless of scale, all medical practices need top-of-the-line security, reliability, coverage, and management if it is to implement any sort of electronic management of patient care or personal data. A hospital at a research university and a small dental office have the same needs: offer guest WLAN access, process payment cards compliantly, access patient records as per HIPAA or CAP compliance, and provide prioritized connectivity for medical devices involved with patient care.

It is the innate complexity of the WLAN, and a specialized skillset unrelated to IT, that makes independent practitioners a prime candidate for buying wireless management.

This approach has worked for Steve Martocchio, VP of operations for Cooperative Technologies, an MSP with clients in healthcare. “Basic security such as encryption and MAC filtering are standard, but other considerations, such as separate VLANs for specific devices should be taken into account,” Martocchio says. “It’s also important to plan the wireless coverage map, ensuring that coverage extends and is sufficient in all areas.”

Even in a small practice, this presents challenges that healthcare professionals hire MSPs to solve. Standardizing clients on enterprise hardware is a part of the business model for some MSPs—it lets them monitor and control hundreds of SMB networks with a single console—but is a tough sell for cost wary healthcare practices.

Low-cost, low-touch networks solve for healthcare

A medical practice under 10 seats does not require enterprise WLAN solutions for connectivity and compliance. In many instances, a simple hardware update fulfills compliance needs and delivers performance for the latest advancements in connected care. In many cases, it's a "set and forget" low-touch setup.

Laguna Hills Family Dentistry

For Laguna Hills Family Dentistry, installing a compliant, responsive modern network setup meant a hardware update and implementing basic network security best practices. They placed all HIPAA-sensitive data behind a firewall, and managed network traffic with a Linksys 28-Port Business Managed Gigabit PoE+ Switch. Cable connections running to the server, workstations, and printers, and the WLAN served staff and guests internet access.

Segmenting its guest wireless from the main network infrastructure with a Linksys Business Wireless-AC Dual-Band Access Point provides reliable Wireless-AC coverage throughout the office, allowing laptops and mobile devices to access the internet and the office network as needed without compromising performance or security. Initial setup at the practice left room for scaling up the network.

Beverly Hills Plastic Surgery Group

When Beverly Hills Plastic Surgery Group (BHPSG) expanded into a new location it needed to cover more area with its WLAN. The practice uses wireless for guest internet access, smart TVs, and an assortment of customer-facing gadgetry. Internally, doctors and staff use mobile devices for EHR management and operating advanced 3D Imaging SaaS applications—on premises and remotely.

All said, this is a typical situation for a growing healthcare company in 2017— a large space, large bandwidth demands, large compliance responsibility, but still a small company in terms of headcount.

Any time there are multiple access points within a building, practitioners are looking for seamless connectivity as patients and staff move between access points with wearables and mobile devices. Spotty LTE coverage at the new BHPSG location, in combination with the size and makeup of the building, made it troublesome to maintain consistent wireless coverage.

A network comprised of 802.11ac Wave 2 access points with MU-MIMO technology suits this type of challenge.

Wireless users can walk the entire space without interrupting their connection, and WLAN bandwidth control is granular enough to orchestrate on a per-device basis. BHPSG achieved the wireless throughput it needed by installing five AC2600 APs for whole-office WLAN. At the center of the network, a 52-port managed switch and a firewalled VPN router directs traffic on the office network, and keeps it secure and compliant.

So, how much to ride the unicorn?

Do you believe in unicorns? How much would you pay to ride one? Use the analogy to think in terms of value.

Value for any SMB outsourcing its wireless service means not having to think about the network. Everything works like magic. The only thing better than riding a magical unicorn is riding a unicorn for less each month. Is easy, quality, and affordable network equipment a mythical creature that we've been drilled to believe is a fantasy?

"As the entire market gets more competitive and the bigger players realize that lots of SMB business adds up, the higher-end MSPs have some catching up to do in offering effective, affordable managed Wi-Fi," says Lee Badman, a WLAN consultant and author of network management texts.

Showing how cutting edge networks operate on business-class equipment that's purpose-built for SMBs should raise questions for MSPs paying high licensing costs for enterprise solutions their clients do not need. Especially when your target buyer is the traditional, cost-conscious small network customer.

Easy, quality, & affordable is the SMB currency

In deriving value, IT pros like Badman think of hardware on axes of "easy" and "good" – easy management, and good performance. An SMB buying managed WLAN should expect both. Best in breed solutions sell themselves in that manner. "I have been in love with Meraki since long before Cisco bought them," he explains. "There's no disputing the 'easy' and 'good' here, but the very pricey licensing model is getting a bit tired given the competition that's afoot now."

"Wireless network is becoming like a utility," says James Moon, owner of Los Angeles-based managed services provider Techmedics, which provides WLAN support to a client base of around 60 companies. "Everybody thinks that Wi-Fi is free, but as an MSP, the thinking is, how do we make money on that?"

The model that Moon offers presents clients a choice. He sells Meraki, but supplements his product offering with more cost-effective options for smaller business. For organizations that want a business-class network without enterprise-tier premiums, it's on the menu; customers appreciate having a choice and it helps him close more business.

Moon conducted a WLAN install for a 7,500-square foot, 100-person office space shared by multimedia creative agencies in a downtown Los Angeles high-rise using Linksys 11ac Wave 2 APs and business-class switches. It opened him up to the possibilities presented by breaking the enterprise mold. At the end of the day, if the client doesn't have to think about the network, it means job well-done for the MSP.

If sub-enterprise solutions don't require a lot of hands-on configuration or calls to the provider, does the client know the difference besides the money they save? "The way that we structure our billing has changed," he says. "We're still trying to get a sense of how to monetize while showing value to the client."

Nobody knows the appropriate rate for a unicorn ride apparently.

MSPs profit with networking chops

Ostensibly if you get into this business, network architecture and engineering is something you do better than most people. Everyone is fallible, solutions for certain problems elude the best minds in the field, and enterprise solutions can forgive a lack of talent, creativity, and gravitas.

Setting up WLAN for business isn't easy work. "Even when deploying only a few APs, there are lots of ways to get it wrong," says Lee Badman, who also points out how remarkably easy it is to lose money as a service provider. "With thin margins and a model that doesn't allow for lots of costly site visits, profitability depends on the MSPs understanding of wireless and ability to execute based on each site's requirements."

Consumer equipment won't cut it

They used to say this about IBM mainframe computers in the 1970s. The greatness of IBM's vintage big iron is undeniable. The brand inertia that comes with risk, accountability, and personal livelihood implications for whomever is making the tech procurement decisions is too.

Cooperative Technologies Steve Martocchio's thinking is that consumer hardware will not get the job done for mission critical healthcare networks. When the margin of error is life or death, or massive fines for compromised data, premium WLAN service is a sensible sell.

"In order to achieve [uptime and compliance], enterprise or business grade wireless infrastructure is needed," he says. "SOHO access points sold at box stores don't have the feature sets needed to provide the seamless coverage and management needed."

There is certainly good practice in this sentiment. However, businesses should know there are other options available. Linksys offers solutions that bridge the gap between SOHO and enterprise solutions for wireless. Linksys Business Pro Series Wireless (LAPAC) series offers an ideal in-between for the SMB looking to elevate its wireless performance.

Linksys Wave 2 access points deliver the latest in dual-band MU-MIMO wireless mesh networking. Clustering technology helps MSPs manage multiple access points from a single point of control. In essence, with LAPAC, you get a combination of performance and control typically associate with enterprise gear without the costly price tag.

Differentiating between business class and enterprise needs

That said, for a business that spans several branches, or has upwards of 1,000 endpoints to manage, what can enterprise grade do that business grade cannot?

"Big players are able to capture large market share because they are synonymous with consistency," says James Moon, the brand-heterogeneous MSP in Los Angeles. "Our clients see value in a lower price item—a Cisco appliance at a fraction of a cost, isn't that what people want?"

Enterprise-class products traditionally offer extra features only available at the higher price point and more suitable for handling large volume networks. Common tools include:

- Systems monitoring and scanning against intrusion or attacks;
- Visibility into optimizing placement, user application usage and associated policy controls; and
- Special applications for asset tracking and location analysis.

These features that used to be reserved for enterprise are starting to find their way into business grade. Things that used to separate the classes such as centralized management, scalability and rapid deployments are being overcome with more cost-effective controller options.

Why Linksys for SMB clientele?

No matter which solution MSPs choose for the small business client, the need for new hardware is imminent—namely, new hardware that accommodates more devices and supplies more bandwidth: 802.11ac Wave 2, MU-MIMO hardware.

Equipment updates by and large require new access points and a wireless router refresh. Replacing N-series equipment with the latest 11ac Wave 2 automates prioritization for a network full of smart gadgets and personnel with a BYOD modus operandi. Greater bandwidth, automation, prioritized beamforming, improves a mesh network so it delivers performance users will recognize.

Linksys is at the forefront of mesh networking and Wave 2 MU-MIMO technology in both consumer and business networking. From IT administrative experience, Linksys Clustering simplifies looking after multiple WLANs:

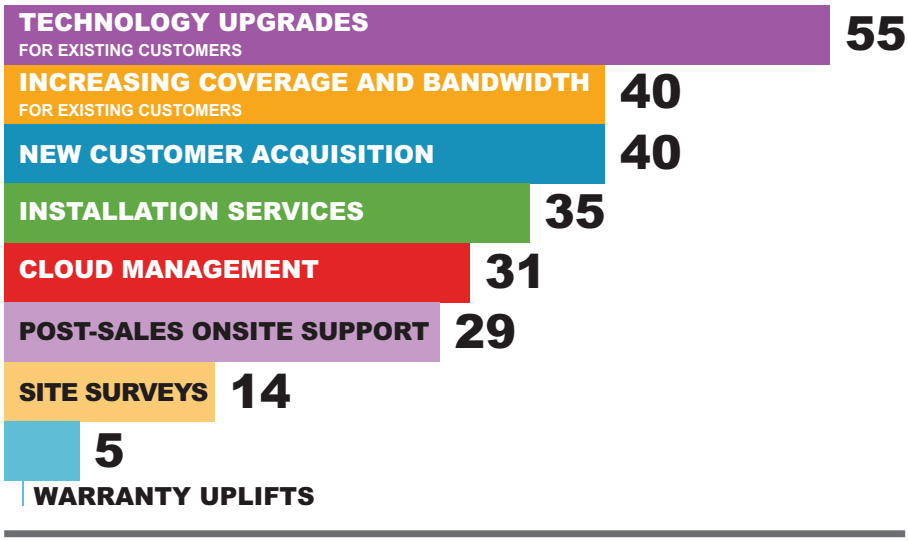
- Single Point Control: "WLAN Controller-less," SW-based Centralized AP Management Interface to control wireless services and manage any joined cluster-APs.
- Automatic Synchronized Configuration: Any last AP configurations made will propagate to all joined cluster-APs.
- Auto Channel Selection: Simple channel planning across the entire wireless network to avoid channel-overlapping.
- Shared WLAN Client Table: Single view of all connected wireless clients on the network.

Data says SMBs need new hardware (preferably easy, cost effective and quality)

MSPs sense that small business customers across every vertical, all of whom deal with more devices on its wireless than ever before, are prime targets for new hardware installation. Extinction of the 802.11n standard drives this need in large part.

Where are the biggest opportunities for you to grow your networking business?

(Select all that apply)



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Cisco Killer? No such thing

How many companies have been called the next Cisco killer? Open source switching company Cumulus Networks, stack-agnostic Avaya Aura, white-box SDN, OpenMesh APs, the latest MikroTik SKU, Mark Zuckerberg and the Wedge 100 obelisk—narratives in the tech media are always on the lookout for a disruptor to wrest dominance away from the licensed support model of the perennial leader in business network solutions, Cisco Systems.

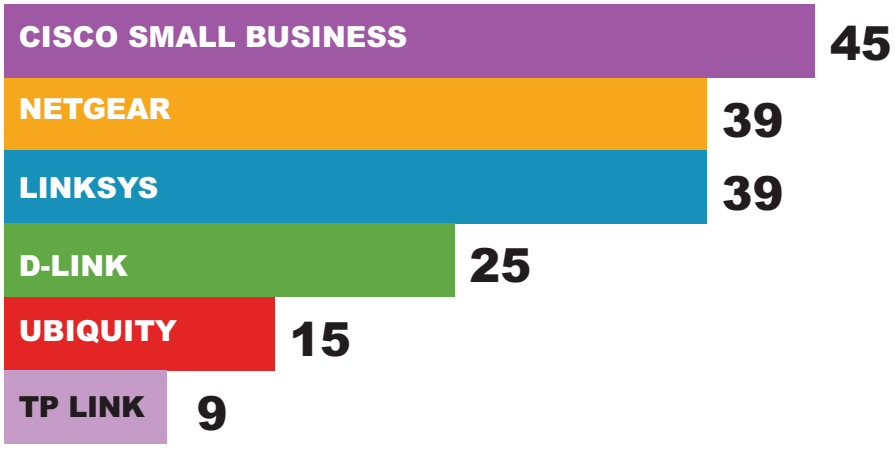
If anything slows Cisco, it's that business use less networking hardware onsite now that we are in the age of the cloud apps and data center colocation.

Analysts blamed the changing face of network infrastructure in business networking for layoffs this year at the company. That's not the only trouble for Cisco. Reports the company lost double-digits in revenue YOY in the MSP segment surfaced in late 2016.

What do the numbers say about brand recognition? The data collected in the Linksys-ChannelPro survey shows that tier-two networking vendors have gained ground on the leader.

Which vendors do you currently purchase switches, VPN router, and/or access points from?

(Select all that apply)



Other options cited: Meraki, SonicWall, Fortinet, HP, Ruckus, Araknis, Calyptix, Open-Mesh, ZyXell, Brocade, Dell, Asus, Juniper, Engenious, IBM, Signamax

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How to sell SMB appropriate solutions believably

In many cases, when a MSP is closing business with SMB customers, the sales narrative boils down to the enterprise solution helps the MSP help your company. If you're a shot-caller whose job depends on uptime and compliance, a unicorn ride might get you fired.

A smart MSP like Steve Martocchio understands that SMB clients will pay top dollar to not think about the network. "When the solution standardization conversation comes up, our message is—as an MSP providing a fixed price model—in order for us to be efficient and effective, we need to maintain a standard technology stack that we can train all our staff on."

The "help me, help you" value proposition covers a lot of ground. "Organizations that understand what technology does for their business, and the productivity losses incurred when systems are running sub-optimally, are usually likely to invest in an infra-structure that allows them to get the most out of their people."

Want to win over late-adopting SMBs? Offer options

The underserviced SMB customer fits a certain profile. They might be savvy enough to set up single-location wireless that meets their needs, or enlist dedicated IT staff to do it for them. If neither is true, they pay enterprise rates for SMB wireless needs. Or, worst case scenario, they run insecure, low-performance Wi-Fi in their location.

"Most small businesses have bigger fish to fry than worrying about their Wi-Fi, but I have seen environments where an SMB insists on doing it themselves. This might be to save money, or because the owner is very tech-savvy, or because they have been burned by a VAR," Lee Badman says.

In any case, winning new business for outsourced WLAN depends on how you position your products. For late adopters, chances are they're not looking to gain ground with new technology, but rather looking for a cost-effective way to stay in business.

For an MSP, adding an alternative to high-cost enterprise WLAN licensing appeals to this persona; at the very least a secondary options adds value to your proposition by simply being available to a prospective client.

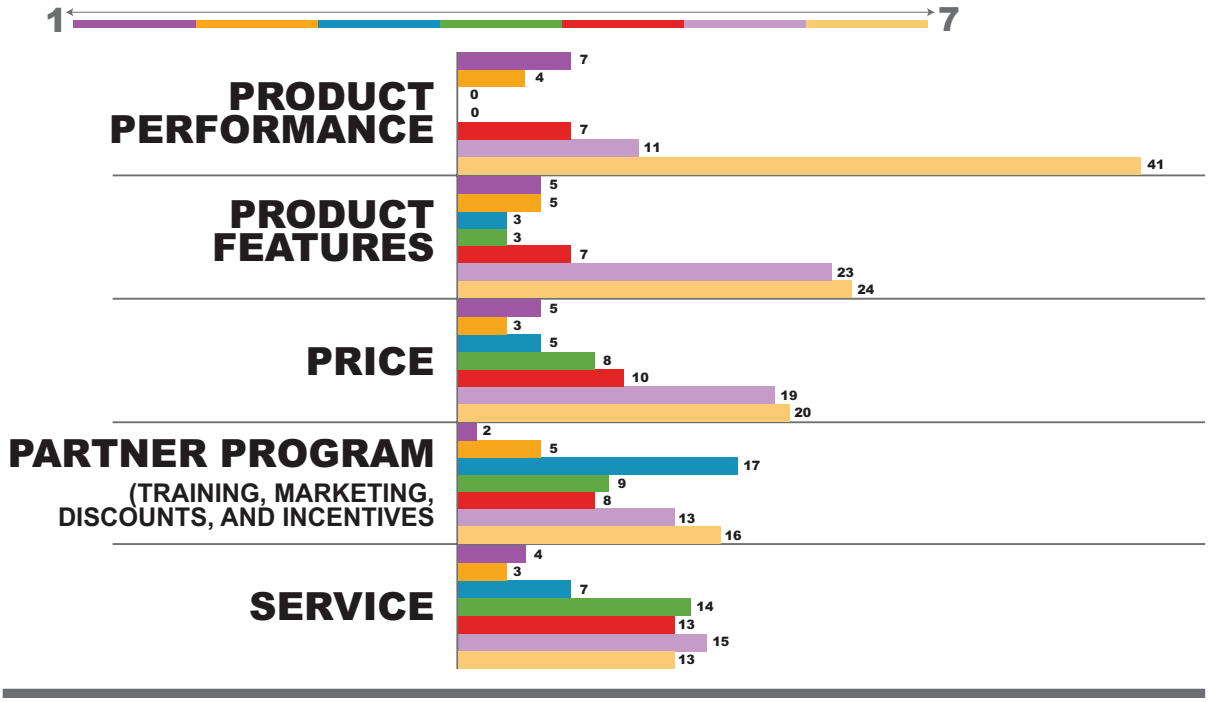
The seemingly mythical importance of product performance

Compete for SMB wireless business by offering MSPs solutions that are both easy to use, and offer good performance specs. Sounds like a great idea, right? The ChannelPro survey says MSPs agree wholeheartedly. When deciding which products to offer SMB prospects, MSPs rank the top three important factors as:

1. Performance
2. Performance
3. Performance

What are the factors/benefits you look for when choosing a hardware networking vendor?

Please rank the selections in order of importance.
1 being most important and 7 being not important at all.



Other options cited: Vendor reputation, comp, reliability and maintainability, Do they provide patch updates for their products, product availability, on time delivery, Warranty, Product Reliability

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While logical, basing product offerings strictly on performance rarely happens in the selling of technology for business. Everyone says they want to ride a unicorn until one walks up with a saddle and bridle. They're taller than you imagined, and seeing the magical horn in the flesh is a little weird. You'll probably lose your job if you fall off.

"A lot of good Wi-Fi hardware gets turned over, and much of it just gets discarded," Badman says. "At the same time, marketing "one offs" can be hard, and I don't personally know of anyone in the US making a real go as an MSP based on reflashed or white-box Wi-Fi. I'd love to see more of it, personally."

"Whether this can be profitable or not will come down to a given MSPs wireless chops and business acumen as they build brand recognition and a viability story against established market names."

Key Takeaways

- Wireless in the office is more important now than ever before—data indicates that certain verticals, starting with healthcare, have great need for the latest equipment.
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