

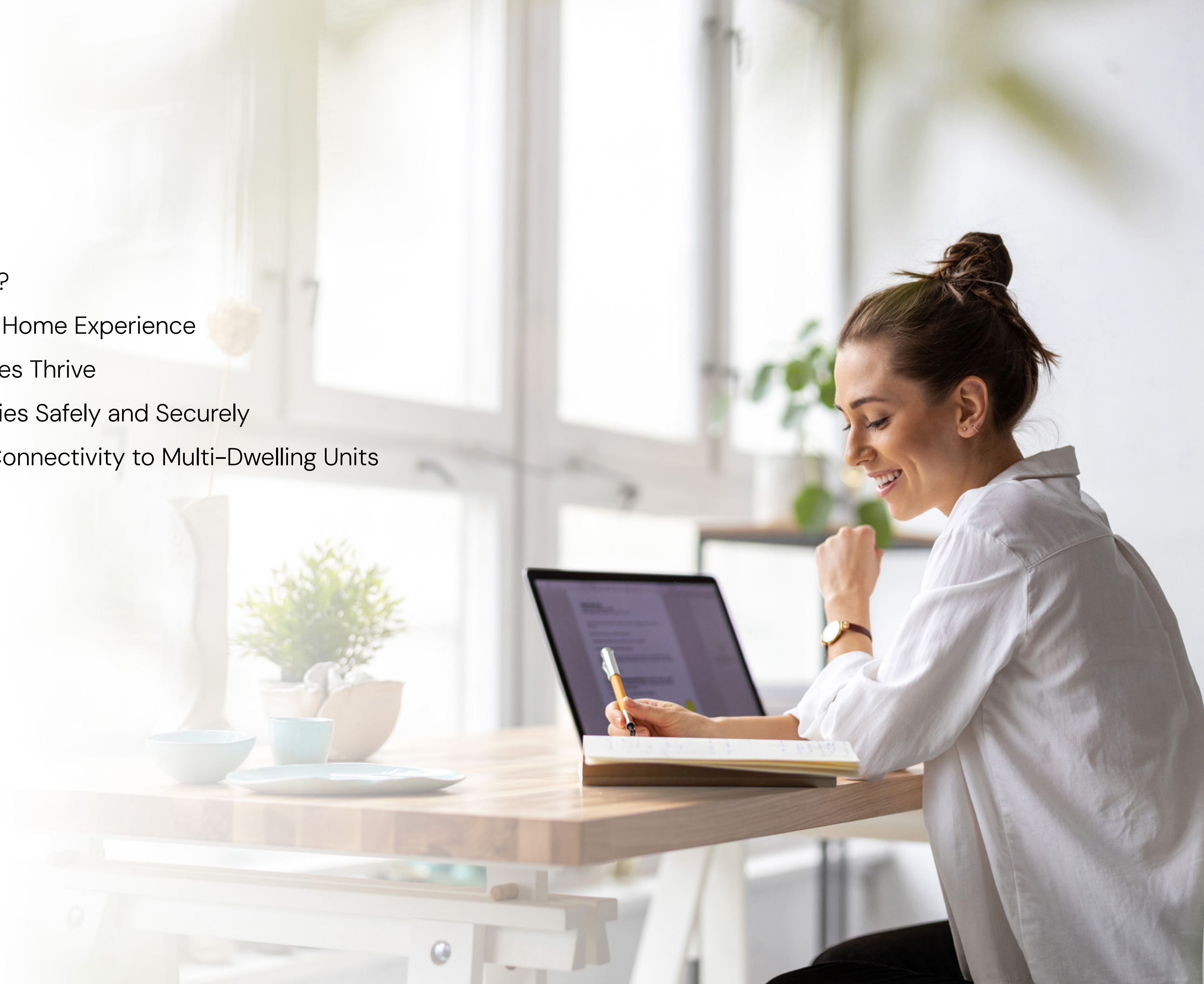
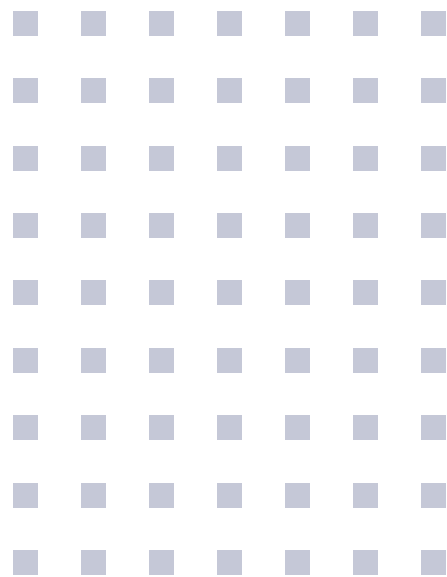


The SmartLife Solution: Transforming Subscriber Experience with Managed Services



Table of Contents

- 3 Introduction
- 4 Chapter 1: Why Managed Services?
- 6 Chapter 2: Delivering the Ultimate Home Experience
- 10 Chapter 3: Helping Small Businesses Thrive
- 13 Chapter 4: Connecting Communities Safely and Securely
- 16 Chapter 5: Bringing World-Class Connectivity to Multi-Dwelling Units
- 18 Conclusion



Until recently, most broadband service providers (BSPs) built their value proposition around speed—the player offering the most “Gigs” won. However, this is not a sustainable, long-term strategy. It’s a race to the bottom, particularly when two or more high-speed providers exist in every market. When every BSP’s offer looks the same, what will set you apart?

This strategy also discounts the tremendous, differentiated value that local BSPs can offer: an in-depth understanding of subscriber needs, tailored services, world-class support, and commitment to community.

Innovative BSPs will win by creating an exceptional experience for consumers, businesses, and entire communities. At the heart of that experience is offering managed services that address subscribers’ specific needs.

This eBook outlines how BSPs can transform their businesses by taking advantage of a new era of value-driven managed services, moving from broadband connectivity provider to experience provider. It will also explore opportunities for BSPs beyond residential subscribers to leverage managed services and expand their business into segments such as small businesses, community services, and multi-dwelling units (MDUs) in a scalable manner.



Why Managed Services?

Service providers have an opportunity to go above and beyond connectivity to give subscribers an exceptional experience by providing managed services to meet the needs of the Residential, SMB, Community, and MDU markets.

The benefits are obvious for subscribers. When subscribing to a BSP offering with managed services, subscribers enjoy a seamless, worry-free experience and always have access to the latest technology. A growing range of innovative services meets their evolving needs, whether at home, work, or out in the community.

For BSPs, the rewards are equally beneficial. By offering a portfolio of value-added managed services, you can differentiate in an increasingly crowded—and commoditized—broadband marketplace. You can grow your business by introducing new revenue streams, increasing average revenue per user (ARPU), and target entirely new market segments with a tailor-made solution, like small businesses or MDUs.

From an operational perspective, managed services can help BSPs reduce inbound support calls and reduce unnecessary truck rolls, leading to lower operating expenses (OPEX). Managed services are proven to increase subscriber satisfaction and loyalty, reflected in higher Net Promoter ScoresSM (NPS[®]). Finally, managed services significantly enhance the value provided to the communities served.



The Power of the Platform

New services were once cumbersome for BSPs to launch and support. By deploying a cloud-based broadband platform, BSPs can dramatically accelerate launch velocity, rolling out new, value-added managed services in days or weeks by using the same hardware and cloud management tools for all subscriber types. This will increase efficiency for your operational teams. The same platform also allows you to address new opportunities with small businesses, communities, and MDUs. You can dramatically simplify service rollout and management by using the same Wi-Fi systems, cloud services, workflows, and training.

Marketers can use cloud-based subscriber insights and data to engage subscribers with managed services. They can develop tailored offers and personalize messages to align with subscribers' unique needs, increasing adoption rates and making it easy to engage subscribers at every stage of the customer lifecycle. They can also use these insights to inform campaigns to increase ARPU and reduce churn.

Support teams can seamlessly manage and scale new services. With end-to-end visibility of all subscriber's experiences within the same cloud tools, they can troubleshoot and resolve issues quickly. Even better, support teams can proactively identify and address potential problems before they impact subscribers. Self-serve options, like a mobile app, empower subscribers and relieve pressure on support teams.

A platform approach means that you can easily expand the services you offer and the markets you serve. You can start with managed Wi-Fi for residential and layer on additional enhanced services, such as home network security, advanced home controls, connected cameras, and social media monitoring.

By embracing the power of the platform, even the smallest BSPs can easily build a portfolio of value-driven managed services to transform the subscriber experience and fuel business growth.



SCTelcom Transformed Rural Life With Managed Services for Home, School, and Around Town

Kansas-based cooperative SCTelcom continues a 70-year history of supporting their communities by leveraging the Calix Broadband Platform and SmartLife™ managed services to expand their business model. They now address three distinct markets—residential, schools and community spaces, and small businesses. Moreover, the platform allows SCTelcom to take advantage of operational efficiencies that support the launch of new managed services. Their results are as exceptional as the services they offer: 3 percent ARPU growth, customer satisfaction scores (CSAT) in the 90s, and an NPS of +79. Beyond the numbers, SCTelcom enjoys increased brand equity built on the positive impact of its services on its communities.

Delivering the Ultimate Home Experience

Subscribers depend on you, their reliable BSP, to enhance their home experience by making it more convenient, secure, and enjoyable. They want services like whole-home Wi-Fi, network security, connected-camera home security, advanced parental controls, and online monitoring to protect kids, to name a few. And, of course, they don't want to find the best solution, only to worry about an unreliable experience. This chapter will explore some of the challenges subscribers face at home—and how you can address them with managed services.





Set the Standard With Hassle-Free Managed Wi-Fi

The ultimate home experience starts with secure, reliable internet and managed Wi-Fi seamlessly integrating into subscribers' lives. Keep them connected—indoors and outside—with the latest and greatest Wi-Fi technology. Give them a self-service mobile app so they can personalize and manage their experience. With managed Wi-Fi, you eliminate the headaches and hassles, leading to happier, more loyal subscribers.



Defend Home Networks Against Cyberattacks

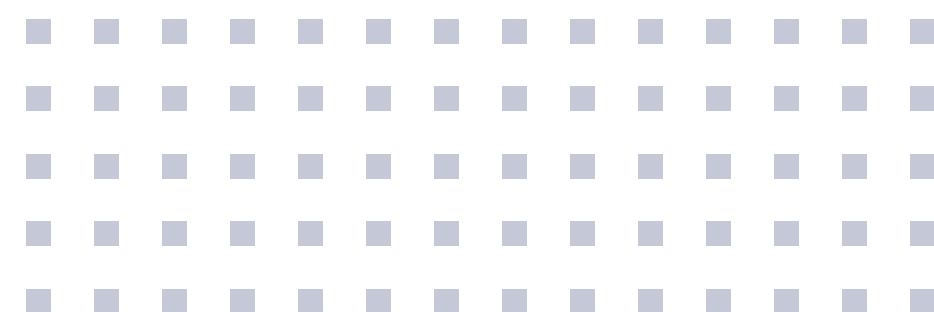
Today's typical U.S. household has an average of 17 devices connected to the internet—everything from smartphones and tablets to smart TVs, gaming platforms, and VR headsets. As subscribers' lives increasingly move online, the potential for cyber threats also grows. In 2023, the FBI's Internet Crime Complaint Center fielded a record number of complaints for internet crimes, including business email compromise, ransomware, phishing, and others. Subscribers need comprehensive—but easy-to-use—protection to keep malicious websites, viruses, and other intrusions away from their homes.



Keep Kids Safe From Digital Dangers

Kids spend more time online than ever—average daily screen use among tweens and teens increased 17 percent during the pandemic. And although the internet has improved life in so many ways, it also has the potential to put society's most vulnerable—children—at greater risk for harm. For instance, nearly half of U.S. teenagers have experienced cyberbullying.

Families are desperately looking for tools to help them keep their kids safe from digital dangers. They want to create and enforce online rules for the users and devices on their home networks while blocking inappropriate or harmful content. They also want to monitor kids' online lives to gain visibility of issues such as cyberbullying, online predation, self-harm, suicidal ideation, violence, and more across text messages, emails, apps, and social media platforms.





Protect What Matters Most to Subscribers

Eighteen percent of Americans own smart home security technology, such as cameras, sensors, or alarms, up from 11 percent in 2020. While tech-savvy consumers increasingly embrace do-it-yourself (DIY) options, many subscribers want to avoid researching, selecting, installing, and maintaining the systems themselves. With managed services, you can give them the best of both worlds. Offer tailored packages of internet-connected cameras, doorbells, and lights they can control and customize with a mobile app. You take care of maintenance and give them choice for installation – giving them peace of mind that their home and family are protected.



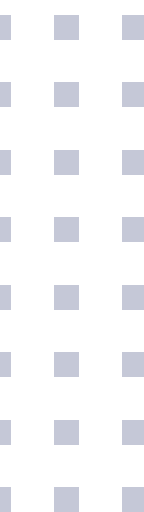
Ensure Subscribers Stay Connected to Critical Services

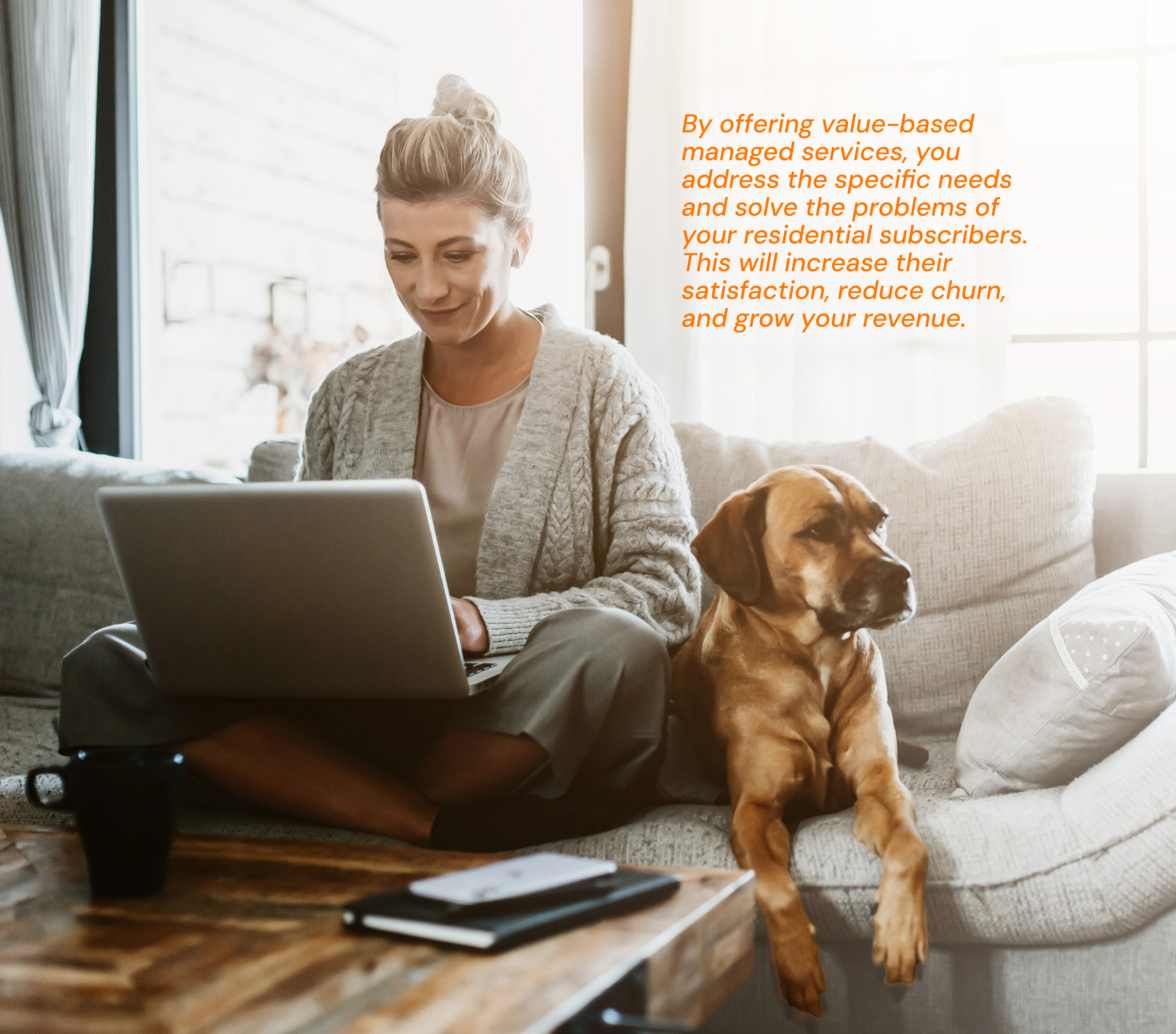
The pandemic forever changed the definition of the workplace, as work-from-anywhere and hybrid working has become the norm for many companies. Even now, more than a third of U.S. adult workers who can work remotely do so all the time, while 41 percent work a hybrid schedule. Given their reliance on connectivity, work-from-home subscribers want assurance that even in a network outage, they'll be connected to essential business applications, and the household will have access to school, health, and security services.



Differentiate to Meet Subscribers' Needs

By coupling managed services with data-driven subscriber insights, you are ready to develop a differentiated offering strategy. You can offer experiences tailored to meet the unique needs of discrete subscriber groups. For instance, you can create an offer for families who want to ensure a safe online experience for their children. It builds on the standard Wi-Fi experience and gives parents tools to help them enforce online rules, combat cyberbullying, and secure their homes. An offer for gamers would highlight features like hyper-responsive connectivity and gaming traffic as part of their home experience. You can offer plans for those working from home, emphasizing productivity enhancements, work device prioritization, and premium managed Wi-Fi.



A woman with blonde hair tied in a bun is sitting on a light-colored couch, looking down at a laptop. A brown dog is sitting next to her, looking towards the right. The background shows a bright window with a view of a building.

By offering value-based managed services, you address the specific needs and solve the problems of your residential subscribers. This will increase their satisfaction, reduce churn, and grow your revenue.



Highline Reimagines the Home Experience and Boosts CSAT to 95%

Forward-thinking BSP Highline has leveraged insights on their subscribers to develop a differentiated offering strategy that enhances the subscriber experience, drives ARPU growth, and increases satisfaction. Backed by their Ultimate Wi-Fi Experience, Highline grew their subscriber base by 56 percent in 2022. Building on this, the following year, Highline launched personalized service offerings like “Gaming,” “Streaming,” and “Working Warrior.” Six months after going to market with these personalized service offerings, Highline had increased ARPU by 15 percent. And their subscriber satisfaction is reaching new heights—Highline grew their CSAT rating to 95 percent, up from 93 in 2022.



Helping Small Businesses Thrive

Small businesses are the lifeblood of communities around the globe. There are over 40 million small businesses in the United States, the United Kingdom, and Canada alone. And while small businesses employ 80.4 million people, they have long been an afterthought when it comes to broadband solutions.

Like their larger enterprise counterparts, small businesses need always-on connectivity, network access control, staff management, enhanced customer experiences, and robust network security, among other capabilities. Compared to larger companies, however, most small businesses can't afford sophisticated IT solutions and don't have the dedicated IT staff to support them.

This chapter examines small businesses' requirements for productivity services and how BSPs can address these needs with managed services.





Robust Network-Based Security

Due to their size, small businesses may view themselves as something other than cyberattack targets. However, research shows the opposite. One study found that a record-high 73 percent of small and medium business owners experienced a data breach, cyberattack, or both in the previous 12 months. Like larger companies, small businesses need robust network-based security that guards against malicious websites, viruses, and other intrusions, ensuring that critical business systems are protected. They also want content filtering to control employee access to specific applications and ensure customers enjoy a safe Wi-Fi experience.



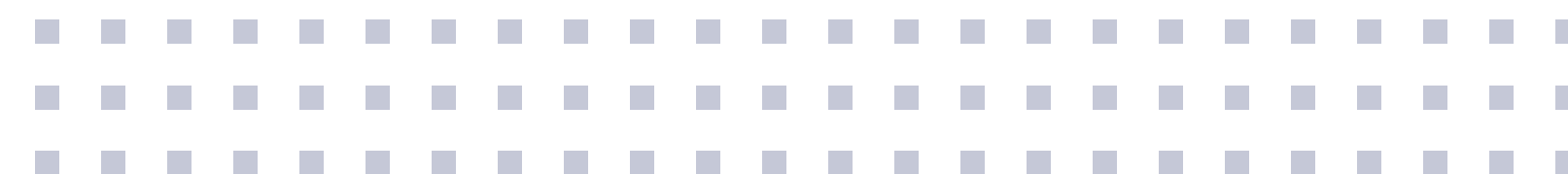
Network Access Control

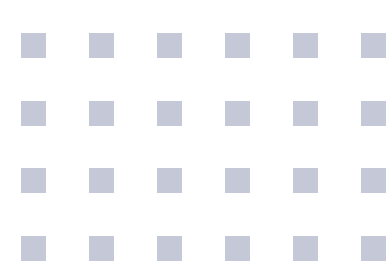
One of the most critical capabilities is isolating traffic and applying security policies to create dedicated networks for different use cases. For most businesses, these use cases include the business owner, staff, customers or guests, as well as business systems such as point of sale (PoS) terminals. Having separate, dedicated networks designed for each use case enhances security and gives every user appropriate access to the network resources and business systems they need to perform their role efficiently and drive higher productivity. Network isolation also enables businesses to meet industry compliance standards, such as the Payment Card Industry Data Security Standard (PCI DSS), a requirement for credit card transactions.



Simplified Staff Management

Staff turnover is common in small businesses. Business owners need the ability to quickly and easily onboard new employees onto the staff network and remove them when their employment has ended without impacting other staff. Additionally, business owners want insights into employee productivity to continuously improve operational efficiency.





Network Resilience

While network outages can be annoying for residential users, they can be catastrophic for small businesses. Some estimates indicate that a single hour of downtime can cost small businesses more than \$25,000. Businesses need to operate even if their fiber connectivity is interrupted. Critical capabilities like WAN and cellular failover ensure that small businesses stay up and running—and productive—no matter what.



Enhanced Customer Experiences

Consumers expect Wi-Fi connectivity at the businesses they frequent, whether at the coffee shop, hair salon, or car dealership. This is more than just a consumer benefit. Sixty-two percent of small businesses said customers stayed longer if the establishment offered free Wi-Fi, with 50 percent reporting higher consumer spending. Small businesses in more rural areas also serve as places of community for town residents. You can support businesses and the community by offering safe, secure Wi-Fi that creates an excellent experience for companies and consumers.



Meeting the Unique Needs of Small Businesses With Managed Services

Thanks to managed services, you can now deliver the combination of reliable connectivity and productivity small businesses need. A broadband platform approach helps you accelerate time to market and reduce operations expenses while expanding into this lucrative segment. And your small business customers can focus on what they do best—running their businesses.



DirectLink Case Study

Oregon-based cooperative DirectLink is taking advantage of Calix SmartBiz, an all-in-one managed service solution, to address the needs of hundreds of small and medium businesses (SMBs) in their service area. They launched their all-inclusive OMNI Pro service in October 2023 and met their three-month adoption target in three weeks. In just four months, they had signed on more than 100 SMB customers to achieve a penetration rate of 10 percent.

Connecting Communities Safely and Securely

The ability to provide secure, reliable community Wi-Fi offers many benefits. Access to Wi-Fi hotspots is a driver of economic growth and a way for citizens to access a range of public services, including education, healthcare, and government, among others. With community Wi-Fi, residents and visitors can stay connected no matter where they are—at the dog park, hiking trails, farmer's markets, or festivals and fairs.

Here, we explore just a few use cases for community Wi-Fi that will enhance citizens' well-being.





Providing Critical Connectivity to Support First Responders Across Communities

Whether in urban or rural settings, first responders need reliable, cost-effective connectivity wherever they go. Community Wi-Fi can offer emergency workers, community leaders, and municipal employees high-speed access to online applications without consuming expensive 5G/LTE bandwidth. Critically, next-generation community Wi-Fi can fill the gaps to provide an essential lifeline in areas where cellular coverage is either poor quality or non-existent. While not a replacement for the First Responder Network Authority (FirstNet), SmartTown can act as a supplemental (and even an overlay) network to augment and enhance connectivity for first responders.



Keeping Vulnerable Populations Connected and Safe

In a Boston Children's Hospital Digital Wellness Center survey, staying connected (86 percent) and safe (85 percent) were major factors behind parents letting their child have their own phone. The ubiquitous connectivity of community Wi-Fi can enhance this, ensuring that young people—as well as senior citizens and other vulnerable groups—can travel independently in the community while staying in close contact with family members or caregivers.



Ensuring Students Have Connectivity Beyond School Boundaries

Despite progress in narrowing the digital divide, an estimated 12 million students in the U.S. need more internet access at home. Community Wi-Fi can bridge this gap, providing essential connectivity to help students keep pace in learning and set the foundation for future opportunities. Moreover, community Wi-Fi services that use network security and content filtering provide a private, secure, and safe experience for students on the go.



Enabling the Development of Smart Infrastructure to Improve Quality of Life

Secure, community-wide connectivity is essential to enabling smart infrastructure throughout towns and cities, such as security cameras, intelligent streetlights, traffic management, environmental monitoring, and more. Research from McKinsey & Co. has found that the use of smart technologies can improve key quality-of-life indicators by 10 to 30 percent.

Community Wi-Fi represents a largely untapped market opportunity for BSPs. By leveraging a broadband platform, you can extend the existing residential managed Wi-Fi experience beyond the four walls of the home, connecting subscribers to secure Wi-Fi on the go, across town, in parks, and at outdoor events. It's one more way for you to protect and enrich subscribers' lives while differentiating yourself from the competition and growing your value in your communities.



Tombigbee Answers Community Needs With SmartTown

Mississippi cooperative Tombigbee Fiber pioneered the use of managed services to transform their community. They were the first BSP to deploy Calix SmartTown® community-wide Wi-Fi to their entire network footprint. They transformed the Friday night football experience at nine high school stadiums with SmartTown and now offer connectivity at all high school fields in the regions they serve. Most recently, they have used their community-wide network to give first responders free access to secure and reliable Wi-Fi. Now, more than 100 first responder organizations in Mississippi have access to ubiquitous coverage at no cost—making a positive impact well beyond the Tombigbee customer base to benefit tens of thousands more residents. Their strategy of prioritizing community needs helped grow their business by establishing them as a trusted local technology leader—as demonstrated by their incredible +91 NPS.

Bringing World-Class Connectivity to Multi-Dwelling Units

Global demand for multi-dwelling unit (MDU) properties is growing and is driven by population growth, changing demographics, employment migration, and evolving lifestyles. Regardless of property type—apartment complexes, condominiums, mixed-use developments—owners and managers increasingly view technology as essential to attracting and retaining tenants while enabling automation that will lower maintenance costs.

The result is a significant new opportunity to extend the managed Wi-Fi service you're already delivering to the single-family residential market to MDUs. You can address vast numbers of subscribers with multi-gigabit, private and secure managed Wi-Fi, network security and content controls, and a self-service mobile app to personalize and manage the experience.

That exceptional experience doesn't stop at the front door. With property-wide Wi-Fi, residents can stay connected no matter where they are—at the pool, the community center, clubhouse, or walking paths. In addition to residents, staff and guests enjoy connectivity throughout the property, with separate, secure networks for each user group.

And remember the small businesses in mixed-use developments. With a managed services solution, you can ensure property managers and developers can provide exceptional connectivity solutions to all their tenant types.





An Opportunity for Long-Term Growth

By establishing partnerships with MDU owners and operators, you can help them differentiate in a highly competitive real estate market. They'll be positioned to meet the needs of current and future tenants with the latest technology and address the increasing demand for IoT-powered smart buildings and electric vehicles.

Moving into the MDU market allows you to lock into lucrative, long-term contracts that will increase your overall revenue. Even as you expand your market presence, you can drive operational efficiencies and lower OPEX by leveraging the same broadband platform you use for residential, small business, and community subscribers.



ICS Achieves 10X Faster Time to Revenue and 125+ Percent Increase in MDU Connections

Thanks to their investment in the Calix Broadband Platform, Iowa-based ICS Advanced Technologies (ICS) connected over 125 percent more residential housing units than expected. By deploying managed Wi-Fi on an early version of Calix SmartMDU™, ICS connected 8,000 residential units in 12 months—far exceeding their original target of 3,500 units—while meeting their yearly revenue goal in only seven months. At the same time, they improved customer support for MDU residents (reducing support calls by 60 percent), simplified operations for property managers, and rapidly expanded their footprint nationwide.

Conclusion

To truly differentiate, service providers must transform from merely offering connectivity to providing rich online experiences that improve subscribers' lives. Managed services are the key to delivering these experiences, enabling BSPs to expand their businesses, enhance subscriber satisfaction, and foster deeper community connections.

By leveraging a cloud-based broadband platform, BSPs of any size can rapidly roll out innovative services that meet subscribers' evolving needs. Whether providing seamless, secure Wi-Fi at home, supporting small businesses with productivity services, enabling reliable connectivity throughout communities, or serving residents in MDUs, managed services empower BSPs to add significant value.

Ultimately, BSPs' future success hinges on their ability to deliver tailored, hassle-free experiences that enrich the lives of their subscribers. By embracing managed services, BSPs can set themselves apart in a crowded market and play a pivotal role in enhancing the quality of life for individuals, families, and communities.

Learn how you can transform your business with Calix SmartLife Managed Services—[schedule a consult today](#).

Net Promoter®, NPS®, NPS Prism®, and the NPS-related emoticons are registered trademarks of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld. Net Promoter ScoreSM and Net Promoter SystemSM are service marks of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld.



References

ⁱ

Calix, “3 Steps That Will Simplify How You Launch and Support Managed Services”,
<https://www.calix.com/blog/2022/12-december/3-steps-that-will-simplify-how-you-launch-and-support-managed-se.html>

ⁱⁱ

Parks Associates, “Parks: Average U.S. Internet Home Had 17 Connected Devices in 2023”,
<https://www.parksassociates.com/blogs/in-the-news/parks-average-us-internet-home-had-17-connected-devices-in-2023>

ⁱⁱⁱ

Federal Bureau of Investigation, “FBI Releases Internet Crime Report”,
<https://www.fbi.gov/contact-us/field-offices/sanfrancisco/news/fbi-releases-internet-crime-report#:~:text=In%202023%2C%20the%20IC3%20received,in%20losses%20compared%20to%202022.>

^{iv}

Common Sense Media, “Common Sense Census: Media Use by Tweens and Teens, 2021”,
<https://www.commonsensemedia.org/press-releases/two-years-into-the-pandemic-media-use-has-increased-17-among-tweens-and-teens>

^v

Pew Research Center, “Teens and Cyberbullying 2022”,
<https://www.pewresearch.org/internet/2022/12/15/teens-and-cyberbullying-2022/>

^{vi}

YouGov, “Connecting with Smart Home Adopters: 2024 US Trend Report”,
<https://commercial.yougov.com/rs/464-VHH-988/images/WP-2024-01-YouGov-US-Smart-Home-Report.pdf>

^{vii}

Pew Research Center, “About a third of U.S. workers who can work from home now do so all the time,”
<https://www.pewresearch.org/short-reads/2023/03/30/about-a-third-of-us-workers-who-can-work-from-home-do-so-all-the-time/>

^{viii}

Identity Threat Research Center, “2023 Business Impact Report,”
<https://www.idtheftcenter.org/post/2023-business-impact-report-record-level-attacks-still-high-confidence-in-defense>

^{ix, x}

U.S. Small Business Administration, “2023 Small Business Profile,”
<https://advocacy.sba.gov/wp-content/uploads/2023/11/2023-Small-Business-Economic-Profile-US.pdf>

U.K. Department for Business & Trade, “Business Population Estimates for the UK and Regions 2023: Statistical Release,”
<https://www.gov.uk/government/statistics/business-population-estimates-2023/business-population-estimates-for-the-uk-and-regions-2023-statistical-release>;

Innovation, Science and Economic Development Canada, “Key Small Business Statistics 2023,”
<https://www.bdc.ca/en/small-business-week/about/small-business-is-big-in-canada-infographic>

^{xi}

Atlassian, “Incident management for high-velocity teams,”
<https://www.atlassian.com/incident-management/kpis/cost-of-downtime>

^{xii}

Boston Children’s Hospital Digital Wellness Center, “Children’s First Cell Phones: Parents’ Perspectives on Risks and Benefits”,
<https://digitalwellnesslab.org/research/pulse-surveys/childrens-first-cell-phones-parents-perspectives-on-risks-and-benefits/>

^{xiii}

EdTech, “K–12 Schools Seek to Connect 12 Million Students Without Home Broadband Access,”
<https://edtechmagazine.com/k12/article/2022/03/k-12-schools-seek-connect-12-million-students-without-home-broadband-access#:~:text=Despite%20the%20leaps%20made%20in,or%20work%20on%20online%20homework.>

^{xiv}

McKinsey & Co., “Smart cities: Digital solutions for a more livable future,”
<https://www.mckinsey.com/capabilities/operations/our-insights/smart-cities-digital-solutions-for-a-more-livable-future>



2777 Orchard Parkway, San Jose, CA 95134 | **T:** 1 707 766 3000 | **F:** 1 707 283 3100 | www.calix.com | 06/25
© Calix | All Rights Reserved