



GOT FIBER? **YOU NEED VoIP!**

The Power of Phone Services in Broadband Bundles

BOOST BROADBAND REVENUES WITH VOICE OVER IP SERVICES

Demand for ultra-broadband and Gigabit speed access is growing and fiber to the home and business solutions are on the rise to satisfy this unmet demand. According to the FCC, 61% of U.S. households have no access to 25Mbps or faster broadband services or can only obtain them from a single service provider.¹

Cable MSOs and telcos, and new players including municipal utilities, over-builder ISPs and electric co-ops are all getting in on the action. In urban, metro and rural markets, service providers are building out fiber to deliver premium services and gain a competitive edge. Fiber-to-the-home (FTTH) coverage is expanding 16% a year in the United States and now reaches over 30 million homes.²

While the market for high-speed broadband is significant, many providers are worried about the business model. In a recent Broadbandtrends survey, unclear investment returns were cited as the primary concern for operators deploying Gigabit broadband.³ FTTH has a big price tag too, with cost per home passed at \$500 or much higher, especially in many of these rural and underserved communities.

To bolster the business case, many broadband service providers are launching VoIP services to boost revenues and accelerate investment returns. Most are bundling residential voice with video and data to grow market share and improve subscriber loyalty. And many are launching VoIP services for small and medium business (SMBs) to capitalize on the ongoing transition to IP-based communications.

New broadband service providers have the luxury of building their voice services for the future without being burdened by obsolete hardware-based network architectures. They can leverage new cloud voice platforms to deliver voice as an application in the cloud, helping accelerate revenues with a success-based business model that tightly align investments with service demand. These next-generation turnkey voice solutions deliver web-scalability, agility and superior economics, and free up capital and staff to focus on strategic services.

Intended for service provider executives, product managers and business planners, this eBook reviews VoIP market opportunities and explains how cloud voice platforms can help broadband providers expand revenues and accelerate ROI.

Many new ISPs are entering the market without a background in voice, and there's great opportunity for them to grow revenue, accelerate ROI and deliver a better customer experience with a phone service portfolio.

¹ FCC 2016 Broadband Progress Report, January 2016

² RVA LLC, November 2016

³ Global Service Provider Survey – Gigabit Broadband Services, Broadbandtrends, November 2016

TAP INTO THE \$60 BILLION U.S. VOICE MARKET

Even though it is not the cash cow it once was, the North American voice market is still massive. According to Atlantic-ACM, fixed-line voice revenues exceeded \$60 billion in 2015 in the United States alone.⁴ More importantly, the North American voice market is in a state of transition to IP, fueling new business opportunities for service providers over the coming years.

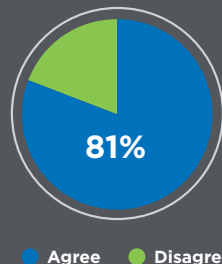
Capitalize on Market Dynamics

Consumers are abandoning legacy landlines for wireless, VoIP and OTT services. And businesses are transitioning from legacy TDM voice systems to IP-based communications solutions. Fiber broadband providers can take advantage of market transition, capturing residential and business customers as they make the move to IP. VoIP services are a surefire way to extend revenues, monetize fiber buildouts and accelerate investment returns. Plus, a Heavy Reading survey shows that service providers see value in offering voice as it broadly helps them with winning customers.

Fixed-line voice revenues exceeded \$60 billion in 2015 in the United States.

“Voice in our portfolio helps drive adoption/growth of other services.”

Source: Heavy Reading - Migrating Service Provider Voice Infrastructure to the Cloud



71%



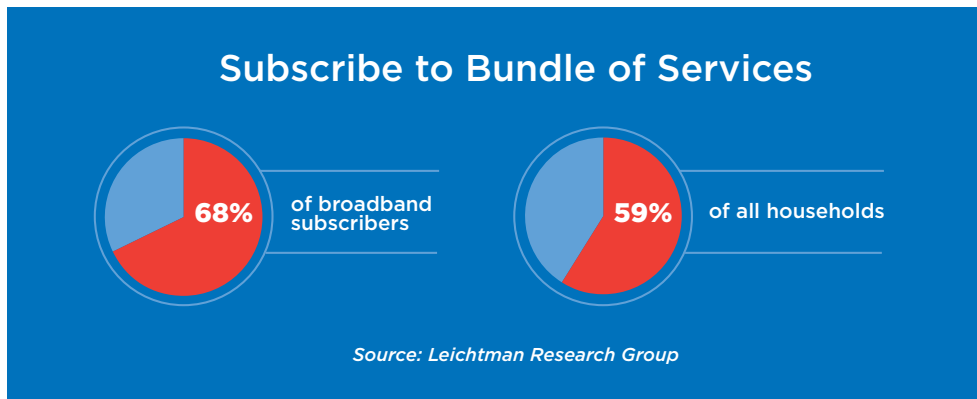
Anticipated growth in VoIP consumer voice revenue from 2014 to 2020.

Source: Atlantic ACM

4 U.S. Telecom Wired and Wireless Sizing and Share Forecast: 2015-2020, Atlantic-ACM, August 2015; estimate includes residential and business service revenues

RESIDENTIAL MARKET OPPORTUNITIES FOR VOIP

Many ISPs are turning to VoIP to build market share and increase subscriber loyalty. Most are using service bundles—packaging voice with data and video—to grow residential service revenues and curb churn. In fact, multi-play services are expected to account for 86% of total subscription revenues by 2018.⁵



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Double play and triple play services are the clear choice for today's consumers. Nearly 70% of broadband subscribers and nearly 60% of all households purchase bundled services.⁶ Multi-play packages are becoming table stakes for ISPs—fundamental for keeping pace with the competition. They are also a major revenue source; nearly half of Gigabit broadband providers take in \$150/month/subscriber or more for triple play services.⁷

In rural markets, there is often not a choice for advanced VoIP services from local providers and end customers are stuck with antiquated and expensive phone options with unwieldy a la carte pricing models. Many of these customers are ready to switch and bundle when they have options.

Three Compelling Reasons to Launch Residential VoIP Services

VoIP is an obvious choice for fiber broadband providers. Many are launching VoIP services to grow revenues, maintain a competitive edge and accelerate investment returns.

⁵ Digital TV Research Ltd, 2013
⁶ Leichtman Research Group, 2016
⁷ Broadbandtrends Global Service Provider Survey - Gigabit Broadband Services, November 2016

Grow Residential Revenue

VoIP drives top-line growth. Consumer VoIP revenue is expected to grow 71% from 2014 to 2020.⁸ With prices ranging from \$20 to \$35 per month, depending on market and competition, residential VoIP services are a straightforward way to boost average revenue per user.

Customer adoption can be strong too. Across all U.S. cable operators, nearly 40 percent of cable broadband subscribers take phone services as well.⁹ Fiber broadband providers should enjoy similar results. One electric cooperative that has been in the triple-play game for over five years reported a 56% take rate on voice.

VoIP is quickly becoming a prerequisite service, essential for maintaining a competitive edge, especially at the higher end of the market.

Take a Lesson from Cable Operators

U.S. cable operators were strong adopters of VoIP and have been delivering voice services for years with great success.

Voice Penetration Rates for MSOs

Mean Average
39%

Top 15 MSO
Mean Average
50%

Source: SNL Kagan

Maintain a Competitive Edge

VoIP is quickly becoming a prerequisite service, essential for maintaining a competitive edge, especially at the higher end of the market. According to a 2016 Broadbandtrends survey, over 90% of Gigabit broadband providers currently offer voice services.¹⁰ In fact, VoIP is more prevalent than any other value-added Gigabit broadband service, including broadcast video.

Going forward, most broadband subscribers will opt for bundled services, and double play and triple-play packages will account for the vast majority of broadband service revenues. Without voice services, fiber broadband providers may be at a competitive disadvantage and leave money on the table. Residential voice services are great way to stave off competitive threats from over-the-top service providers and grow wallet share.

8 U.S. Telecom Wired and Wireless Sizing and Share Forecast: 2015-2020, Atlantic-ACM, August 2015; estimate includes residential and business service revenues

9 SNL Kagan, 2013

10 Survey of 65 operators currently Gigabit services

Accelerate Investment Returns

VoIP services help broadband providers recover costly fiber plant investments more quickly. With the right VoIP solution broadband providers will realize 60-80% gross margins on residential voice services. These high-margin revenue streams improve network monetization and accelerate paybacks.

SMB MARKET OPPORTUNITIES FOR VOIP

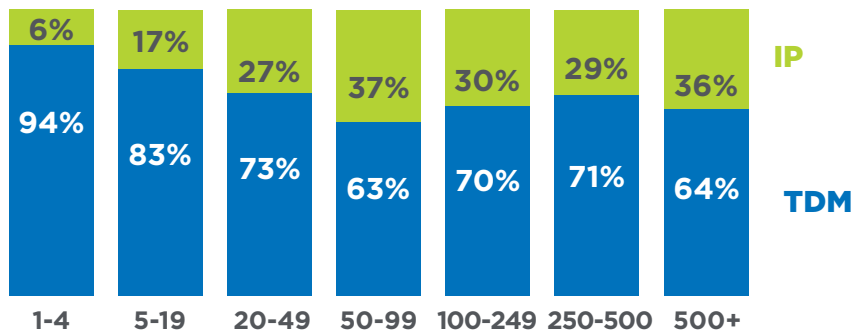
Fiber broadband providers also looking to SMB customers to grow revenue and extend market reach. IP business lines, hosted IP-PBX solutions and SIP trunking services can help SMBs contain costs and improve business agility.

While a majority of large enterprises have made the move to VoIP and unified communications solutions, most SMBs still rely on legacy TDM-based voice solutions. A survey of 1,250 SMBs reveals approximately 70% of businesses with 100-500 employees still use TDM solutions (legacy PBXs, key systems or Centrex).¹² Yet over 80% of them are interested or very interested in moving to IP.

When it comes to VoIP, SMBs are a vast, largely untapped market for fiber broadband providers.

SMB VoIP Market is Largely Untapped

IP Adoption by Company Size

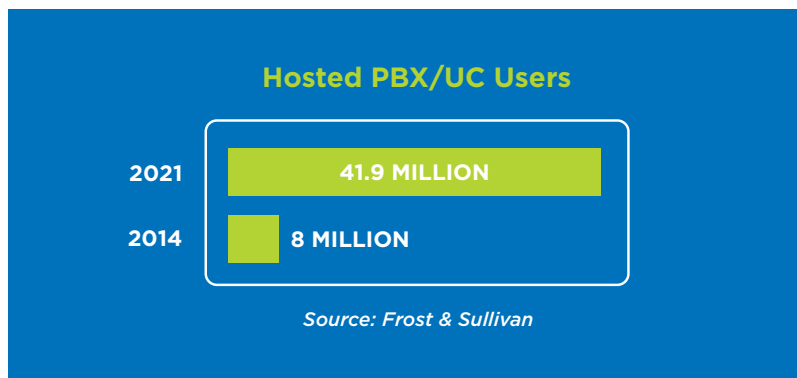


Source: Edgewater Networks

And the SMB landscape is large. According to the U.S. Census Bureau there are over 2.3 million U.S. companies with 500 or fewer employees. They employ a total of 56 million workers—each of whom represents a potential recurring revenue source. With over 3.6 million small offices and home offices (businesses with five employees or fewer) in the United States, SOHOs represent another substantial market opportunity for broadband providers.

¹¹ SNL Kagan, 2013
¹² SMB Market for UC and Hosted Services, Edgewater Networks, 2015

Accordingly, analysts see growth ahead for managed services for VoIP communications. Hosted PBX/UC licenses for SMBs are projected to grow from 8 million in 2014 to 41.9 million in 2021 in North America.¹³ And SMB SIP trunking adoption is expected to increase; IHS Markit had projected 15 million SIP trunk lines in 2016 and, in one of its surveys, the research firm found that 45 percent of SMB respondents use SIP for a portion of their voice connectivity requirements, rising to 62 percent by 2017 as the use of legacy trunks such as T1s decreases.¹⁴ SMB services have stronger margin profiles than residential services and can have longer lifetime value and greater customer stickiness.



Broadband providers can cash in on this massive market opportunity by capturing SMBs as they transition to IP. Nearly half of small and midsize U.S. companies plan to evaluate a new business phone system—most within the next one to three years.¹⁵ In addition, newly launched businesses will choose IP-based systems from the get go.

SMB VoIP Opportunities for Broadband Providers

Business Lines: offer advanced features like hunt groups, advanced call forwarding and other hosted call control capabilities for analog phones and key systems. Ideal for smaller offices that do not require a complete set of premium communications capabilities.

Hosted IP PBX/UCaaS: deliver a fully managed, feature-rich, cloud-based communications solution. Perfect for SMBs who want to extend office voice and UC services to multiple offices, mobile employees and teleworkers.

SIP Trunking: offer IP-based PSTN connectivity services for on premises PBXs and UC systems.

¹³ Frost & Sullivan, Empowering Users with Cloud Communications, 2015

¹⁴ IHS Markit, SIP Trunking and eSBC Strategies: North American Enterprise Survey, 2015

¹⁵ Hannover Research, 2015

Criteria for Adding New Services



Revenue

- Clear demand and customer willingness to pay
- Helps with broadband win rates
- Enables customer stickiness and retention rates



Cost

- Clear cost model
- High gross margins
- Success-based business model low/no CAPEX



Easy

- Easy to manage
- Integrates into back office
- No/low regulatory and legal compliance burden
- No/low staffing requirements



Positive Customer Experience

- Quality experience
- Innovative
- Less expensive
- Future-proof

VOIP IMPLEMENTATION OPTIONS

Service providers have a variety of options for delivering residential and business VoIP services. They can build out and manage their own infrastructure using conventional VoIP hardware or software solutions, leverage a traditional VoIP wholesale white label solution, or take advantage of new cloud voice platforms that deliver VoIP as an elastic service.

Build Your Own Network

The build model is the most CAPEX intensive, resource demanding and time-consuming of the three approaches. With the build approach, the service provider designs, integrates and manages its own voice infrastructure using traditional VoIP network elements (softswitches, session border controllers, application servers, etc.) or newer network functions virtualization (NFV) solutions—a complex, costly and technologically immature proposition. Large capital outlays and high ongoing operations expenses translate to lopsided business models with long payback periods. Worse still, the build approach diverts valuable capital and staff from strategic endeavors.

Wholesale Hosted/White Label

With the wholesale model, the service provider hands over the implementation, hosting and management of the VoIP infrastructure to a third party—often a retail CLEC repurposing its network for wholesale revenue. Most wholesalers leverage obsolete softswitch implementations that were not designed to support elastic services and will struggle to support emerging technologies and future standards.

The wholesale approach frees up service provider staff to focus on differentiated services, but it is still inherently costly and inflexible given its reliance on third-party gear. Most simply mark up their costs and pass them along to the service provider. Service providers are often



BUILD

- VoIP hardware/software
- Heavy CAPEX
- Regulatory burden
- Staff
- Legacy technology
- Slow to market
- Limited agility
- Good operational control



RESELL

- Retail CLECs or local telcos
- Hosted 3rd party hardware/software
- Legacy technology
- Low margins
- Fast to market
- Limited agility
- Low control



CLOUD SOURCE

- Fastest to market
- Turnkey virtualized, web-scale software
- APIs
- High-margin
- Zero-CAPEX, success-based SaaS
- High agility
- Good operational control

required to make substantial revenue commitments to cover the wholesaler's upfront capital expenses. And the wholesaler often maintains control over product definition and have little ability to roll out requested enhancements as they do not own the underlying technology platforms. Worse still, most CLECs are focused primarily on their core retail services. Many treat the wholesale operation as a side business and do not make the necessary product and support investments to ensure successful outcomes.

Cloud Source

With the cloud source model, a trusted software partner delivers VoIP as a cloud-based service. By cloud sourcing VoIP services, broadband providers can accelerate time-to-market, avoid lopsided business models with high upfront costs and long paybacks, and free up resources to focus on premium services.

Unlike conventional wholesale VoIP solutions, new cloud voice platforms leverage the latest virtualization technology, bringing all the benefits of the cloud—web scalability, unrivaled service agility and pay-as-you-grow economics—to the telecom world. All the VoIP network elements that a service provider normally needs to buy, build and operate are virtualized, securely hosted in the cloud and managed by the cloud provider. And the cloud provider integrates with CLEC carrier services, simplifying the operational environment.

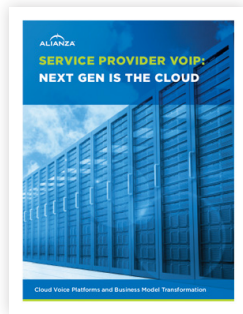
Best-of-breed cloud voice platforms provide easy-to-use web portals to simplify service provisioning and customer lifecycle management, and deep and flexible APIs to streamline integration with back-office systems and other third-party integrations. They let broadband service providers launch VoIP services quickly and cost-effectively, while maintaining strict control over branding, pricing and customer relationships.

CONCLUSION

Grow Revenue and Boost Competitiveness with VoIP

Fiber broadband providers should launch VoIP services to tap into the \$60 billion fixed-line voice market and bundle residential voice with high-speed internet to improve ARPU and boost customer loyalty. Offering VoIP services for SMBs further extends the addressable market and helps local businesses rapidly migrate to superior IP communications. With high take rates and margins, VoIP services help improve asset monetization and accelerate investment returns.

New cloud voice platforms let broadband providers roll out residential and business VoIP services quickly, easily and profitably—while maintaining full control over product definition and customer relationships. A zero-CAPEX financial model tightly aligns expenses with business demands, eliminating risk and uncertainty. Cloud voice platforms let broadband providers fully exploit the growing IP communications market, and better serve customers while freeing up capital and human resources to focus on innovation.



For more information on cloud voice platforms, read our white paper

Service Provider VoIP: Next-Gen is the Cloud

<http://info.alianza.com/service-provider-voip-next-gen-is-cloud>

ABOUT ALIANZA

Alianza radically transforms communications delivery so that service providers thrive with superior economics, feature set and control. Alianza's Cloud Voice Platform provides a zero-CAPEX, high-margin, low-risk solution and is designed specifically to meet the full range of voice requirements for service providers. The turnkey wholesale solution enables cable, mobile, telco and other broadband providers to rapidly launch and profit from residential and business VoIP services. It's a new way to deliver voice service that untangles operators from the restraints of old-school voice networks and frees up resources to accelerate strategic initiatives. The power of Alianza's cloud means lower total cost of ownership and a clear business case for VoIP.

Learn more about Alianza at www.alianza.com or email info@alianza.com.