Future of Voice: How Cloud-based Platforms are Improving Operational Agility

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Communication is the cornerstone of human interaction. People want and need to be connected to each other, whether it's chatting with their loved ones or calling up the local auto parts store to ask a question. Some studies have even shown that consumers and businesses alike prefer human-to-human voice interactions.

For communication service providers, meeting market demand requires the delivery of well-supported end-to-end voice communication systems. While some may believe voice is dying, London-based Omdia Research estimates the number of public switched telephone network (PSTN) subscribers to decline at a compounded annual rate of 14.5 percent from 2022 to 2028 — it's still the most commonly used modality to communicate in business. In fact, the Federal Communications Commission put the number at 95 million — a combination of POTS (plain old telephone system) lines and VoIP connections, with 55 million of those comprised of business lines.

Voice is still a necessary part of the overall communications package for businesses and residences alike. However, legacy voice infrastructure is increasingly costly to operate and challenging to maintain. As Omdia indicates, employees with legacy voice engineering skills are aging out of the workforce at increasing rates. At the same time, servicing legacy infrastructure has become a greater and greater challenge with parts often hard to track down and some engineers turning to eBay to find what they need.

The cloud offers a lifeline for service providers to refresh their voice capabilities and consolidate disparate services and vendor technology onto a single platform, improving operational agility to meet the demands of the modern user. Utilizing cloud-based voice communications infrastructure provides a host of operational benefits for service providers that are looking to streamline and manage their end-to-end voice services. In recent industry conversations, five key areas of focus have emerged.

More Streamlined Management

First and foremost, migrating to the cloud can allow for the consolidation of services onto a single platform, making it easier to manage systems, deploy updates, and centralize control. Cloud communications platforms can also automate routine maintenance tasks such as software updates, provisioning, and scaling, significantly reducing the need for manual intervention. Similarly, software updates and maintenance are automatically distributed, which lowers total operating costs and the number of skilled employees businesses need to manage networks, allowing service providers to focus on the customer experience versus maintaining vendor software.

With the cloud, services are deployed centrally, which reduces resource strain, and creates uniformity across user interfaces, rendering service provider end-user utilization and consumption more efficient.

Mitigated Risk of Obsolescence

Second, a single cloud communications platform can help mitigate the risk of future obsolescence by providing continuous updates and upgrades, ensuring that the latest features and security enhancements are always in place. This proactive approach keeps the system current with evolving technologies and industry standards, reducing the need for frequent hardware replacements and extensive system overhauls. As voice systems increasingly reach end-of-life or become discontinued, vendor support and replacement parts will likely be discontinued. The cloud ensures that your products can continue to evolve with more seamless updates.

Additionally, since it's not viable to build all your infrastructure at once, cloud-based infrastructure allows for ongoing integration with new tools and services, ensuring long-term agility and future proofing. Cloud platforms adapt and respond to change with ease in a way legacy platforms cannot compete with.

Path to Revenue Growth

Third, cloud communications are inherently scalable, ensuring that service providers can accommodate growth and changing business needs. Legacy solutions, on the other hand, have no hope of keeping pace with the demand for a fast, ever evolving, and positive user experience. They lack the capabilities to innovate and adapt to changing market conditions, putting service providers at risk. With a cloud-native platform, voice becomes an application on a broadband network, enabling service providers to more easily manage their product portfolios and accelerate growth. Cloud-based technology offers an easy upgrade path to layer on net-new services and capabilities, such as cloud PBX and unified communications that deliver higher margins. Additional upsell opportunities include cloud contact center, Teams integration and business text messaging services.

Further, users can tap into AI and other advanced data analytics to gather operational and customer insights that better inform the direction of products, services, and the company, resulting in increased competitiveness in the market, product differentiation, expanding growth opportunities, and more. The infinite capacity for improvement and rapid rate of change is the true value of innovation for service providers

Greater Go-to-Market Flexibility

Fourth, when utilizing cloud communications platforms, service providers retain control over their go-to-market initiatives. The alternative to cloud-based services to modernize network infrastructure is to partner with a cloud vendor or retail over-the-top (OTT) provider that delivers its services directly to end-user consumers over the service providers existing network infrastructure. The OTT model risks disintermediation of longstanding customer relationships and delivery of similar services to every other service provider offering the same capabilities from the same vendor. From product differentiation to brand equity and pricing control or margin management, cloud-based technology helps service providers maintain control and management of the customers that are the lifeblood of their business.

Additionally, cloud-based infrastructure introduces greater alignment of cost to revenue with usage-based models that avoid massive up-front CapEx and ongoing subscription fees that may not reflect current market adoption of various products or features.

Decreased Energy Consumption

In recent years, ongoing network expansion and dramatic increases in traffic volume driven by AI have contributed significantly to growing energy consumption across the telecom industry. Accordingly to McKinsey & Co, energy costs average five percent of total revenue with recent energy costs increases outpacing sales growth by more than 50 percent for large operators. Many have announced a combination of decarbonization efforts with the ambitious goal of lowering energy costs by 15 percent to 30 percent.

Migrating network services to the cloud is a critical component of these initiatives to drive energy efficiencies and create more sustainable change. As energy costs continue to increase, with more than 57 percent of c-level respondents to the McKinsey & Co study stating they observed at least a 15 percent increase in energy prices, and pressures to reduce consumption gain even more attention, migrating from less efficient legacy systems to cloud-based communication services offer a critical path to optimizing operational agility and generating greater revenue margin and cost alignment.

In many cases, the OpEx savings can then by positioned to self-fund the migration of communication infrastructure to the cloud and offset ongoing OpEx concerns. Reduced OpEx helps to drive consensus across the organization behind migration strategies, particularly for service providers that have historically focused on CapEx initiatives to fund network improvement. Future Proofing End-to-End Voice Systems

Making the move to a cloud-based communication platform isn't really a matter of if, but when. As service providers look to prioritize voice communication, embracing cloud-based platforms offers a strategic advantage in maintaining effective and modern voice services.

The cloud's ability to streamline management, mitigate obsolescence, support growth and innovation, optimize go-to-market initiatives and lower energy consumption while reducing costs, reinforces the cloud as essential technology for service providers. By transitioning to cloud communications, service providers can ensure their systems remain relevant and scalable, with the operational agility to meet evolving user expectations, and maintain a competitive edge in a rapidly changing market.

In an increasingly connected world, the shift to the cloud represents not just a technological upgrade, but a fundamental step towards a more efficient and future-proofed voice communication infrastructure.