VCUSTOMER:

PREFERRING IP-BASED CUSTOMER CONTACT OVER TDM SOLUTIONS

All said and done, young companies have a singular advantage over the old economy - hindsight. When all avenues for growth have been exhausted, one has to look for fresh approaches. A fresh approach is exactly what Sanjay Kumar, CEO, vCustomer, has taken in the call center industry. Founded in 1999, vCustomer is headquartered in Seattle, Washington, with the back-end being handled out of New Delhi. With top Fortune 100 companies like Microsoft on their client list, it's easy to see why vCustomer banks on technology to cater to its illustrious and demanding customers.

The plan

The call center industry is booming and the competition within it is immense. This means that it's getting harder for a new entrant to differentiate itself from the more established players in a market moving at a frenetic pace. There's no dearth of investments in the area, as huge call centers are springing up across the country. The only way for a new entrant to create a niche is to maximize efficiency and provide maximum bang for the buck for its customers. The goal, for vCustomer, was to provide best-in-class customer care for top brand name US companies and to do it at a reduced cost of maintenance and serviceability. vCustomer focused on becoming a major player in offshore voice-based tech support and, through the use of cutting-edge technology, have been able to maintain their own edge in the market. With $12 million pumped into their India operations alone, vCustomer handles over 2 million calls every month from the USA, UK and Canada.

The technology

Call centers require a complex and reliable IT infrastructure to maintain the levels of service required by demanding customers. They require voice infrastructure to handle calls and network infrastructure for client tools. Call centers may offer voice, e-mail or online support to customers, so a reliable voice and data infrastructure is essential. Traditionally, voice and data networks have been separate entities, as used in a call center. Reliability being paramount, call centers build in redundancy for both these networks to allow for any eventuality. It's easy to see that this means additional investments in two totally separate networks. It also means that two separate networks need to be maintained, utilizing different skill sets. Future capacity needs to be planned for as well. In general, all operational problems are multiplied by two.

vCustomer chose to buck the trend by choosing a 100% IP infrastructure for its call center. By doing this, they have been able to effectively eliminate the complexities of maintaining two separate networks by combining voice and data traffic onto a single unified network. Packetized voice, or Voice over IP, as it is more commonly known, has allowed vCustomer to maximize return on technology investments, while simultaneously reducing maintenance costs for infrastructure. In the traditional call center model, the voice platform is based on TDM (Time Division Multiplexing), which is circuit-based, as opposed to packet-based. Traditional TDM voice solutions require a large amount of equipment to be installed at the location the agents will be working from. In a distributed environment with multiple locations, this can be a problem, with high capital expense added to high administrative and support expenses. Using a packetized voice infrastructure, vCustomer has been able to centralize the voice infrastructure. This means support and scalability issues need to be addressed at a single location, greatly speeding the growth process.

Apart from efficiency benefits, VoIP (Voice over IP) also provides an advantage that is imperative to any business - cost. Worldwide, data networks are growing at a frenetic pace, fuelled by the popularity of the all-pervasive Internet. Worldwide, data traffic has already surpassed voice traffic. This has, as expected, brought costs down. In some cases, IP traffic tariffs are lower than equivalent TDM traffic tariffs. TDM networks do, however, have much going for them. They've been around for a considerably long time, provide high reliability (99.999%) and provide reasonable audio quality for voice applications. TDM networks are circuit-based, that is, a single circuit is occupied for the entire duration of a voice call. In an ideal case scenario, when only one side of the call is speaking at a time, and assuming minimal overheads, packetized voice can double the bandwidth efficiency of TDM. Taking into account the real-world problems of peak traffic and overheads, savings of 30% are attainable, which is very respectable. On a line capable of accommodating 100 simultaneous calls, using VoIP, you may be able to squeeze in 130 calls. Figure that into the huge number of calls a typical call center will handle in a single day, and you begin to see the impact.

Road map for call centers

TDM-based call centers need not be left behind in the pure-IP revolution. Here are the top contact-center technology changes to plan for in the next one to two years:

- Migrate to VoIP - Includes associated changes to IVR, computer telephony integration, quality monitoring or other tools that integrate with your voice channel.

- Migrate your contact routing, management and reporting to a server-based product.

- Migrate your voice self-service applications to a VoiceXML or SALT-based architecture.

- Integrate the routing, management and reporting for all media on a common technology infrastructure.

Another significant advantage that vCustomer gained from using VoIP, as opposed to TDM, was the increased survivability of voice traffic. With channelized voice, as available with TDM, circuit fluctuations can cause calls to be dropped. Using packetized voice, routers are able to recognize fluctuations in the connection and route around the problem. This increases the reliability of service that vCustomer is able to offer.

Net results

Using Voice over IP, vCustomer was able to build a 100% IP-converged network for both data and voice. The advantages of infrastructure centralization, with the combined benefits of simplified maintenance and the clear cost benefits in terms of bandwidth savings, makes packetized voice a viable choice to reduce costs while maintaining or improving quality of service.

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