Enriching Customer Experience

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In the early days of telephony, a basic static-filled connection constituted what customers wanted. *"Hello? Speak up, I can barely hear you!"* Tolerance for what we would view today as poor service was pretty high back then. After all, this extraordinary instrument eliminated the need to travel to talk to someone who wasn't close by.

Technology and service in the telecommunications industry advanced over the decades and another milestone occurred in the late 1960s. Communities began to adopt 911 emergency call systems that gave people a way to call for help.

Those early life-changing services paved the way for the expectations customers everywhere have for today's telecommunications network and services: always-on communications. Whether it's Internet service, local and long-distance telephone services, traditional and cloud-based voice and data products or other services, the inherent quality can have wide-ranging effects, whether it involves a business, the monitoring of a healthcare device or children getting homework done on time.

The way that telephony technologies have advanced and been absorbed into our daily lives is even more significant than it was 100 years ago. Today, the tolerance for problems with any communications services is low, as it should be. In short, customers today have high expectations of their communications providers.

Building the Enhanced Customer Experience

Customers want to be assured that the network driving their telecommunications services will be a strong point in their lives and businesses. Of course, there is a difference between standard Internet service and an enterprise-dedicated Ethernet connection. Yet even at the modest levels of basic Internet service, connections are important to customers and the expectation is that their service will always be on.

Today, an enhanced customer experience rests upon three pillars:

1. **Redundancy.** Engineer the network so there is not a single point of failure. For example, overlapping the physical fiber as well as the optical side is recommended.
2. **Active monitoring.** A network operations center with 24x7x365 monitoring and troubleshooting helps ensure any issues that crop up can be addressed.
3. **People and communication.** From customer service through design, turn-up, testing, and maintenance, it is the people behind the network and their pro-active, constant communication that are crucial to optical network performance and an exceptional customer experience. An effective company fosters a culture where employees work alongside customers as trusted partners dedicated to helping them meet and exceed their current and future goals.

To ensure an enhanced customer experience, engineering personnel should work closely with information technology professionals to make sure a network design will meet their needs. For a financial services firm trading securities, transferring funds and other activities, an outage could be detrimental. In this scenario, a business will require the highest level of redundancy. Obviously, there is an associated cost, but it's

important to communicate what is required to be sure the provider builds in the protection needed to meet the unique needs of each business customer.

Naturally, there will be times when necessary work is performed in the network or technology undergoes upgrades and short interruptions occur. These maintenance windows should typically be scheduled around midnight to 5 a.m., a time that probably will have the least impact. Customers are notified of these activities so they can plan accordingly for these maintenance windows.

Rural and Urban Communities Share the Same Expectations

Broadband connections are bringing opportunities throughout the country. The Midwest's Silicon Prairie, mainly Indiana, Iowa, Kansas, Missouri, Nebraska, South Dakota and Wyoming, is home to a growing number of tech companies and startups.

Although there is talk about the rural digital divide, in reality there are no longer big differences in customer expectations between rural and urban areas. With the proliferation of the Internet and the way information travels, rural areas are not isolated. They are connected, and their expectations are on par with what customers in urban areas expect. A cell phone call may drop in certain spots on the highway, but as far as the network goes, rural customers are every bit as dependent on having good service as urban customers. Let's look at a few examples.

IoT agribusiness operations

The connectivity and the redundancy in their network and the level of performance is as important to a Midwest agribusiness operation as it is to urban customers.

A large cattle-feeding operation may have multiple locations in rural areas where it conducts business with fiber back to its headquarters. It depends upon that network to buy and sell commodities and conduct other crucial business activities. Staff also uses agriculture Internet of Things (IoT) devices, chips and other solutions to capture data about the animals they are feeding.

Nonprofits need high-performing networks

Do Space, a technology library open to the public with a dedicated 1 Gigabit fiber internet, is not typical free Wi-Fi at your local public library. At Do Space, everyone has free access to the latest software, devices, free learning and ultra-fast Internet. Patrons can learn the basics of 3D design, use a laser cutter and 3D printer, experience virtual reality technology, attend coding classes and video game development workshops and much more. Conceived and developed in Omaha, Nebraska about four years ago, Do Space has a vision to help feed Omaha's tech talent pipeline.

Omaha Performing Arts (OPA) provides Broadway, jazz, blues, dance, comedy, family and popular entertainment and relies on the performance of its fiber optic network. The network connects its performance venues at the Orpheum Theater and Holland Performing Arts Center as well as its headquarters into a key data center where the company houses its servers and data storage. The network supports mission-critical functions such as performance operations, ticketing and back office operations like human resources and accounting. OPA has interactive performances where families can log onto their Wi-Fi during the performances and participate. Along those lines, it also offers apps with subtitles so hearing-impaired patrons can better enjoy performances.

One-of-a-kind, not one-size-fits-all

For a local telephone company in 1910 in the Heartland, a basic connection between two people in two different places was extraordinary service. For many years, sharing

a party line with five to six strangers was fine.

Now, the telecommunications landscape will see increased fiber deployments to meet an insatiable demand for bandwidth.

Customers want always-on broadband-driven service with Internet connections to mobile phones, devices, TVs, and voice-controlled intelligent personal assistants such as Echo devices throughout their homes or offices. They expect to be able to stream content to three or even six devices. Will they embrace more long-form programming and digital content, such as the new Disney Plus channel and *The Mandalorian?* Undoubtedly, home broadband offerings will consist of higher and higher speeds per home. In addition, many enterprises today require 1 Gbps or more. With the deployment of fiber for 5G, we can expect more changes.

Yet providers must always keep in mind that successful basic practices from past years, decades or even more than a century should be remembered, even as technology and services evolve. They must uphold their commitment to delivering high-quality services tailored to the needs of individual customers.

What will the future hold? Whatever the setting, here’s to making the next 100 years of the customer experience extraordinary!