

Polymath Profile #3: Plantronics

Sea of Tranquility, the Moon: “Good luck, Mr. Gorsky!”
In the run-up in 2009, to the fortieth anniversary of the moon shot, it was inevitable that all the fascination and intrigue and rumors around the *Apollo 11* mission would be replayed. So the debate started anew about why Neil Armstrong had invoked Mr. Gorsky during that poignant moment. Was Gorsky someone influential in Armstrong’s life? Was Armstrong taking a swipe at the Soviet competition?

Wait!

NASA transcripts show Armstrong never spoke those words. The Plantronics headset he wore faithfully recorded everything historic he said. No Gorsky.

Yet the Web insisted Armstrong did. The rumor supposedly started in 1995 and refuses to die. As in so many things on the Web, if anything it has since grown in color.

How Plantronics and the Web have evolved over the last few decades provides a glimpse into the evolution of modern telecommunications and networks.

Five Decades of Telecommunications

Gunjan Bhow, a vice president at Plantronics, recounts the company’s history: “We spent much of its early life making specialized headsets for aviation and space, including the one Neil Armstrong used. We also found a niche in mission-critical communications in the air traffic control system and emergency services.”

Then came the growth in toll-free numbers in the 1980s (even though AT&T had first offered what it called “inward WATS” in the late 1960s) fueled

by the declining prices as the “Baby Bells” divested from AT&T competed vigorously for long-distance calling. That opened up a vast new market in contact centers. PCs started to proliferate, and the need for headsets to stay productive while typing on keyboards opened up another market.

The 1990s saw the company move into the emerging SOHO (small office, home office) market, which had mushroomed as companies allowed employees to work from home or at satellite offices and as corporations shrank and used smaller contract firms more.

The last few years have seen Plantronics products get untethered. Bluetooth headset use has grown rapidly with the explosion in mobile phones and with an increasing number of laws mandating hands-free calling while driving. By the end of 2009, Plantronics had grabbed almost a third of the retail market for Bluetooth headsets.

Services such as VoIP also make the computer into the telephone and Plantronics is happy to provide the device to talk with it.

Says Bhow, “UC [Unified Communications] is what is driving our next stage of growth.”

He was recruited to help Plantronics with its UC strategy. It is an industry term for software that coordinates the broad range of ways we communicate—chat, text, fax, voice mail, video conferencing, and more. The UC market is expected to grow to 50 million voice seats by 2014, about half of which will need headsets. Plantronics estimates that could add \$350 million to its revenue base. Various corporate customers are piloting rollouts, with the largest deployment in excess of 60,000 seats.

UC has also brought convergence to the traditionally separate technology and telecommunications markets. Bhow continues:

We are selling much more to the CIO. In the past we sold to a specialist focused on PBXes, routers, and switches.

Actually, the CIO primarily provides the due diligence and approvals. We are marketing more to end users with their rapidly changing expectations. Think of how little the office phone has really changed compared to the form/factor of mobile devices that consumers are now much more attuned to.

As the next generation of workers moves in, Plantronics’ surveys show they find untethered communications more private than those based at their desks. And to meet increasingly mobile lifestyles, the company offers rugged products, such as the Explorer 370, which is water, dust, and shock resistant and features its WindSmart technology to ensure users experience clear calls no matter what the ambient noise.

Plantronics says every one of the Fortune 100 companies uses its products. Of the 25 companies named in *BusinessWeek’s* 2009 customer

service report, 24 of them use Plantronics headsets in their contact centers. Given its traditional range of call center products and its more recent Bluetooth and VoIP products, Plantronics' enterprise success is understandable.

Consumerization Effect

Until it sold its Altec Lansing unit in 2009, Plantronics was also in the entertainment market with digital-powered audio systems for personal computers and portable audio devices. It is still in the gaming market, where Web comments say, "With its surround sound, I could easily distinguish between friendly suppression fire from my right and enemy shouts of terror directly ahead as I led the ambush."

The consumer mind-set keeps Plantronics focused on the marriage of sound innovation and personal fashion and comfort. So it is not uncommon to see product reviews calling them "cool" and "sexy." The gaming headset just mentioned was developed in collaboration with Dolby. The Plantronics Discovery 975 wireless Bluetooth earpiece comes with a protective and stylish case that doubles as a charging station, which allows the mobile professional to recharge the headset while on an airplane, on the street, or anywhere that power is not accessible. The case can recharge twice—in effect, tripling call and standby time on the road.

Darrin Caddes, vice president of corporate design, spent more than 20 years designing products for some of the world's best automotive and motorcycle brands, including BMW, Fiat, and Indian Motorcycle. His unique design philosophy at Plantronics is summarized in these comments:

Each member of the Plantronics Design team brings a specialty expertise from human behavior and anatomy to color and complex surface development.

Headsets will continue to evolve as fashion accessories as we have seen with both watches and eyewear . . . we make decisions on which ones to wear based on how we feel or choose to express ourselves at that moment. I believe headsets are destined for the same cultural evolution.

Pushing Form/Function Boundaries

One of Plantronics' most innovative products is the Calisto Pro—a polymath of a device. Calisto Pro allows you to make landline, VoIP, and mobile calls and listen to a music player. The product comes with a compact phone

and a headset that share a common charging base station. The phone is built on digitally encrypted DECT™ 6.0 technology, which frees it from interference with other home appliances, such as microwaves. It provides up to 300 feet of roaming range, a built-in speaker and flip-up waist clip for walkabout dialing, and caller ID viewing. It has its own voice mail system with multilingual menus.

Or users can don the headset that plugs into the ear and is lightweight (0.65 ounce). It does not need a headband, making for less fatigue during lengthy calls. A successor product, the Savi Office, added a headband option. The headset combines a noise-canceling microphone and an extended boom to reduce background noise.

Work-at-home professionals can also pair the headset with their Bluetooth mobile phone while on the road, and a call can automatically reconnect with the Calisto Pro phone upon their return.

Hold on, there's more!

The product is enhanced with its PerSono Suite software. A series of icons available in the software allow users to interact with their music player, IP phone, PC, and headset with simple button presses on a graphical user interface. Users can tell the media player to pause or mute when a call is received or ended.

Plantronics' Outlook Utility allows users to transfer up to 200 Outlook contacts with three numbers each (work/mobile/home) from their PC into the Calisto Pro Series handset and then dial any of those numbers from the handset. It also allows users to dial from the PC, transfer the call to the headset/handset/speakerphone, and then walk around.

The Calisto Pro qualified as a finalist for the 2008 International Design Excellence Award and is offered in a bundle with voice recognition software Dragon Natural Speaking. The software benefits from the sound quality with the extended boom closer to the mouth and because the built-in noise-canceling microphone also improves the sound quality.

More advances in audio quality come with the Plantronics Voyager PRO Bluetooth headset, which has a dual-microphone boom to accurately isolate voice signals: One microphone captures voice while the second microphone identifies and removes background noise. It also incorporates the company's WindSmart technology, which filters and reduces wind distortion. The end result is the cancellation of ambient noise in a crowded restaurant or car without overprocessing audio, so voices sound natural during conversations.

Looking ahead, the company has qualified for a patent for a "movement-powered headset." Wireless headsets are convenient but having to charge them regularly is not fun. The patent seeks to use kinetic energy from the user's body movements to charge the headset.¹ The patent filing says:

The human head moves a large amount during normal daily activities, such as subtle nods, turns, shaking, etc., as well as when the whole body is experiencing movement such as walking, running, climbing stairs, riding in a vehicle, riding a horse, riding a bicycle, scooter, skateboard, skiing, climbing a mountain, and virtually any physical activity. Additionally, movement and vibration of the headset when not being worn, such as when stowed in the user's pocket, briefcase, purse, or a vehicle, would also contribute to the headset's charging ability.

“Is voice dead?” Bhow recently asked that provocative question on the Plantronics blog. He also provided the answer: “In a culture drowning in text, the power of emotion and the role of voice are more important than ever before.” In other words, we may use voice less, but we use it for more impact. Plantronics plans to continue to make sure you can put your best voice forward.

Recap

Each decade or so Plantronics has successfully transitioned with major swings in the telecommunications industry—from call centers to the small/home office, to the explosion in mobile devices to increasing IP-based telephony.

In addition, its devices are allowing for the convergence of the growing number of voice channels, including landline, VoIP, and mobile. The company also is blending streaming audio and consumer fashion trends. For all this, Plantronics qualifies as a polymath in the telecommunications market.