

# The new definition of voice

How HD voice is changing the way businesses communicate

**M**ore and more companies are rapidly incorporating IP-based unified communications services into their business processes. Doing so allows an organization to take advantage of the efficiencies and flexibility that come with voice and data convergence, not to mention the rich set of features that only IP can deliver.

“Converged networks are the reality in enterprise communications and the sky is the limit in terms of the potential for new applications and services,” says Monty Ferdowski, the president of Broadcore. “What is interesting is that as the communications technologies evolve and more and more unified communications components emerge, IP telephony continues to be the foundation for enterprise communications.”

The sound of the human voice is the single most powerful component that unifies and clarifies all other forms of communications, says Ferdowski. Yet, since the invention of the telephone there has not been any enhancement in the sound quality of a telephone call — until now.

IP-based infrastructure coupled with IP telephones will deliver high definition (HD) voice, which utilizes a wideband technology to deliver a deeper clarity and better audio experience. HD voice represents the next wave in IP telephony, proving that VoIP quality can be vastly superior to that of the traditional public telephone network.

“VoIP provides for a new network dynamic to deliver a broader spectrum for voice communication and dramatically improve the user experience,” Ferdowski says.

*Smart Business* spoke with Ferdowski about HD voice, why it’s becoming so popular and how it can help your business.

## Why is HD voice better than a traditional phone call?

For starters, HD voice transmits more than double the range of audio frequencies. Traditional phone connections sample voice audio at 8,000 times per second and transmit frequencies from 300 Hz to 3,400 Hz, which is a range of 3 KHz. HD voice samples voice audio at 16,000 times per second and transmits frequencies from 50 Hz to 7,000 Hz, which is a range of 7 KHz. Therefore, HD voice can



**Monty Ferdowski**  
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carry more higher and lower sounds than a traditional phone call can. It doesn’t transmit every audible frequency, but it does deliver enough of them to make it sound like the conversation is occurring face to face, not over the phone.

Plus, a traditional phone call has many other limitations. You may have trouble distinguishing similar sounds or voices, especially in a conference call when many people are talking at once. Not only that, a traditional phone connection may make it difficult to understand different accents or subtle verbal cues. In today’s business world, you need to be able to communicate as quickly and as easily as possible. There’s simply no room for bad connections and/or miscommunication. That is why HD voice is becoming so vital.

## What other benefits can be gained through an HD voice solution?

You’ll get twice the clarity of ordinary phone calls, leading to life-like, vibrant conversations. Clear communication is vital to today’s businesses.

Other benefits include:

- More natural conversations that significantly boost recognition and enhance productivity

- Significant depth and nuance, allowing critical highs and lows in a person’s voice to be heard

- Better clarity, reduced static

- Improved productivity from enabling remote collaboration with vibrant, life-like voice quality in communications and collaboration

## Is HD voice hard to implement?

If you already use VoIP, you’re ready for HD voice. It shouldn’t take much more than a changing of the data and codec. The data bandwidth required for HD voice today is comparable to what you need for narrower band. Two HD phones can connect to each other over an IP network with just a minor software update to the PBX. However, if you want more HD voice features and a wider deployment of HD phones, you’ll need to enhance both the hardware and the software of your PBX. Still, it’s a fairly simple process.

## What kind of ROI can a company expect from HD voice?

You will have to make an investment in a HD voice solution, but as with most technologies, the equipment will eventually pay for itself. The real ROI will come from doing business better. HD voice delivers enhanced clarity over ordinary phone lines and over IP for life-like, vibrant conversations. This increased clarity enables much more natural conversations, which will significantly boost recognition and can help enhance productivity. You can hear every word without repeating, which saves time and cuts down on misunderstandings.

As global business and remote collaboration continue to increase, the need for clear communications has become more critical than ever. Accents and cultural differences can lead to costly misunderstandings. The clarity delivered by HD voice makes remote collaboration easier, enabling geographically dispersed teams to communicate as effectively over the phone as they can in person. <<

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