

Why your mouse may soon be obsolete

Voice technology — meaning hands-free information access — is coming to dentistry, and the impact will be revolutionary.

[curated by Dr. Lou Shuman, with Dr. Ryan and Zach Hungate, founders of Simplifeye]

Last month, I had the opportunity to meet with the founders of a company that's revolutionizing how dental practices use technology. Since founding Simplifeye in 2015, Dr. Ryan and Zach Hungate have been hard at work creating a number of exciting and innovative solutions.

The Hungate cousins believe that advancements in smartphones, smartwatches and voice technology have an unquestionable place in today's dental practices — and they're delivering products that are changing the way we run our offices. I'm particularly excited about their voice technology, which is tailored to the needs of the dental office.

How did you create your voice technology?

As voice technology improved, Simplifeye recognized that there was an opportunity to develop this revolutionary technology for dental practices, especially since dentists' hands are often occupied. Once the technology was fully developed, Simplifeye partnered with DEXIS to create DEXVoice, a smart voice assistant that simplifies clinical workflows. DEXVoice enables practitioners to control DEXIS software by voice command.

Why is voice technology a good fit for dental practices?

Voice technology is being used everywhere. We've all been using it in our cars for years, and now people are using voice to activate timers, order

new products or ask for the weather report. Products like Amazon Echo and Google Home are flooding the market, and dental practices now have the exciting opportunity to jump on board.

Voice is a perfect fit for dental practices because of its benefit to adhering to infection control protocols. Because dental professionals are constantly wearing gloves, using a computer is a tedious and inefficient task. Our focus is to have dental practices move away from having to touch a mouse and keyboard, and instead leverage their voices to complete both simple and complicated in-office tasks, such as viewing radiographs or preparing instant case presentations.

How does this voice technology respond to commands and complete tasks?

We've partnered with industry leaders such as DEXIS to create a really special technology called DEXVoice. While dentists have previously had to pause mid-procedure to put the handpiece down and take off their gloves to look at images, take patient notes or call for a hygienist, they can now use DEXVoice to say a command without interrupting their workflow.

DEXVoice is voice-activated by Simplifeye, allowing dentists to say commands like, "Alexa, compare the bitewings of #19." Suddenly, two radiographs will be displayed on the screen, allowing them to explain the needed treatment and help the

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patient understand at a new level. Because the patient will have a visual comparison, they can instantly see why a filling is needed.

Dentists can also ask Alexa to "show all of #4" and the bitewing, PA, intraoral image and CariVu of #4 will instantly be displayed in a grid, creating a beautiful case presentation for the patient. They can even ask Alexa to capture a full-mouth series or capture a PA of a specific tooth. This would normally take more than 25 clicks with a mouse, but with voice activation, all they have to do is place the sensor in the correct position and hit the exposure button.

Where do you see the future of voice technology going in dentistry?

A better question might be, "Where is voice not going?" If you start to think of the many interfaces we have to interact with as dental professionals, voice can assist in almost every instance. When applied correctly, a visual user interface (VUI) makes complicated movements or tasks easier with just a simple, natural language request.

Let's imagine a technology that costs next to nothing and always gets the job done right when you ask. That is voice's present and future. While trying not to give away too much of our pipeline, Simplifeye will first be adding high-quality instructional videos to our voice repertoire. Imagine asking Alexa for an implant demo and having a beautifully narrated video immediately show up on a 40-inch screen in front of your patient.

Then, imagine voice starting to affect hygienists' daily routines. What if the charting and note-taking experience was completely voice activated? The possibilities are endless — and, we can say with confidence, achievable. ●

ABOUT DR. RYAN HUNGATE AND ZACH HUNGATE

Dr. Ryan and Zach Hungate founded Simplifeye in 2015. Simplifeye's mission is to create an immersive clinical environment where healthcare providers are surrounded by the information they need to deliver the best patient care. Based in New York City, Simplifeye was rated Best New Product - Technology by Henry Schein Dental in 2017 as well as Best of Class - Emerging Technology by Cellerant Consulting in 2017.

ABOUT DR. LOU SHUMAN

Dr. Lou Shuman is a long-time contributor to Dental Products Report and is president and CEO of Cellerant Consultant Group. He is also the chairman of the Technology Advisory Board at WEO Media, a Venture-in-Residence at Harvard's Innovation Lab, and he founded a dental-education internet company.