

Authentication & fraud prevention, Customer engagement

Deutsche Telekom delivers more intuitive and secure authentication with Nuance Gatekeeper

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Deutsche Telekom aimed to set a new bar for customer authentication in the German market and eliminate the frustration many customers face with passwords and security questions. Using Nuance Voice Biometrics as part of Nuance Gatekeeper, the telco effortlessly authenticates customers using their voice—becoming the first company in Germany to use Nuance’s conversational biometrics technology. Deutsche Telekom now delivers more convenient and secure experiences to its customers and allows agents to focus on their roles delivering standout support services.

With more than 400,000 customers engaging with its contact centres every day—adding up to over 100 million per year—Deutsche Telekom faces a monumental customer service challenge. Its 30,000 contact centre agents need to deliver fast, convenient, and accurate support across a wide range of topics, from starting and upgrading contracts, to technical assistance for its handsets and broadband services.

But before customers even reach a contact centre agent, they need to be authenticated. It’s an essential step that’s required for all leading businesses within the telecoms industry, to protect customers’ personal data and prevent fraud attempts. But too often, it’s a step that causes frustration, and takes up valuable customer and agent time.

Customers need to remember their personal identification numbers and passwords or work their way

through a series of security questions, which they've often set up years previously. Most customers have to remember details like these for almost every brand they interact with, too—which means it can be a near-impossible task retrieving the right ones at short notice on the phone.

Deutsche Telekom recognized the authentication challenge for its customers and agents, and wanted to create a simpler, more convenient experience for its voice channel. But crucially, the telco couldn't compromise on security.

Deutsche Telekom raises the bar for authentication in Germany

Deutsche Telekom took a new approach to authentication, implementing [Nuance Voice Biometrics](#) as part of the [Nuance Gatekeeper](#) security solution. As the first German company to introduce Nuance's voice biometrics technology, Deutsche Telekom has set a new standard for security checks in the market, identifying and authenticating customers using natural, conversational speech.

Now, whenever customers enrolled into Deutsche Telekom's voice authentication service contact the telco, all they need to say is: "At Telekom, my voice is my password." The voice biometrics service then matches the caller's voice to the customer's stored voice ID, and verifies the caller is genuine.

"Voice biometrics works very well. Even if callers are tired, or have a cold—they're still recognized," explains Caroline Clemens, Senior Expert of User Interface Design at Deutsche Telekom. "We always say that if your mother recognizes you on the phone, so do we."

More convenient and secure voice experiences

The voice authentication service isn't just faster and simpler; it's also much more secure than conventional passwords or ID numbers. Nuance Gatekeeper determines whether voices are genuine based on hundreds of physical characteristics and the audio's frequency, making voices much more tamper proof than traditional authentication methods.

It means that fraudsters have almost no chance of logging into customers' accounts, even with a voice recording. Also, any danger of social engineering—a method where criminals trick contact centre employees into revealing customers' personal data—is nearly eliminated.

"With voice biometrics, we work in compliance with GDPR, because we don't store any voice recordings of our customers. Instead, we store a long series of numbers, called a hash," explains Caroline. "Criminals can't gain any information about our customers from these numbers—even if they managed to steal the hash, they couldn't do anything with it."

The solution is much more accessible than other forms of biometrics, too. Voice biometrics only requires a standard handset microphone, and doesn't restrict customers by their age, device, or physical limitations—while solutions like facial biometrics and fingerprinting require modern smartphone features and can be fooled easily.

A service celebrated by customers—and the market

Since Deutsche Telekom launched its voice biometrics service, more than one million customers have enrolled and created a voice ID. And it's proven worthwhile, too; the service has been used to authenticate customers more than two million times, and it successfully verifies more than 85% of callers.

Customers are also satisfied with the new service, with more than 75% of those enrolled agreeing that it's more convenient than using a customer number.

It isn't just customers who appreciate Deutsche Telekom's seamless authentication service. Since implementing Nuance Gatekeeper, [the telco has been awarded two Gold German Stevie Awards](#) this year—one for the Team of the Year in Customer Service and another for best technical support. Plus, the telco was among the top three companies at the European Customer Centricity Awards in both Digital Strategy/Transformation and Best User Experience categories.

With such a successful deployment in its voice channel, Deutsche Telekom is now exploring where it can add Nuance Gatekeeper to more areas of customer service and extend its use cases. "Currently, voice biometrics is just in our IVR, but the next step would be bringing it to other channels," says Caroline. "Also, our customers can only have one voice ID profile per phone number, but we'd like to change that. It'd be ideal for customers who have co-signed contracts for the same phone number, or families that live in the same house."

See what you could achieve with voice biometrics

Deutsche Telekom's deployment is just one example of what's possible with Nuance Gatekeeper. We work with hundreds of leading brands worldwide to help them create seamless and safe customer experiences and improve their defence against fraud.

Explore our [voice biometrics white paper](#) to see what you can achieve.

Tags: [Telco](#), [Customer success story](#), [Nuance Gatekeeper](#)

More Information

Get the white paper

Learn more about voice biometrics in our white paper, and discover how you can create safer, more convenient experiences for your customers.

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About Brett Beranek

Brett Beranek is responsible for overseeing the security and biometric line of business at Nuance, a Microsoft company. In this role for the past 12 years, Beranek has brought Nuance to a leadership position in the biometric authentication and biometric fraud prevention space. A thought leader in the field of biometrics, Beranek is a frequent contributor in industry events and the media on the topic of AI technology and its use by the fraud community, and how society can mitigate against these evolving threats. Prior to Nuance, he held various leadership positions in the biometrics and security industry. He has earned a Bachelor of Commerce, Information Systems Major, from McGill University as well as an Executive Marketing certificate from Massachusetts Institute of Technology's Sloan School of Management. Beranek is also a certified Master Fraud Prevention Black Belt professional.



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