

Tips for training your users

Getting the best results from VoiSentry

The first implementation step is to determine what process you will use to confirm the identity of each person at the time of enrolment.

The next step is to decide how you will get voice samples from each person for whom you are creating a voiceprint during the process of enrolment. You will need a way to capture audio from each person, such that you have only that person's voice and not a mix of that voice and other voices or background noises.

Voice biometrics is particularly valuable when used remotely, over the phone, and it makes sense to capture the audio needed for voiceprints using that method. A benefit is that audio for enrolments and subsequent verifications is subject to the same or similar network conditions, leading to better results.

The phone in question can be a mobile phone, a landline phone, a VoIP phone, or a VoIP client using the microphone on a PC or laptop. However, because quality and clarity are important, users should not use speakerphones. Speakerphones are designed to pick up ambient sounds and also create echo, both issues that will interfere with creating a suitable voiceprint.

Consistently using the same type of device will give consistent results. Consequently, it is best always to use the same type of device or train the system on all the devices the user will use.

Once a caller has enrolled and a successful verification is made, it is good practice to consider updating the speaker's model. The decision should be based on the verification result, desired security level, and risk. If considered necessary, authentication by other means should be conducted prior to updating with the verified audio.

You may think that getting each user to record their voice for enrolment in a soundproof room, using a professional quality microphone, will give the best results. However, that will not be representative of real-world use of the system, where users to be verified will be calling in over the phone. In consequence, that is not recommended.

Biometric voiceprints are a special category of personal data as defined in the General Data Protection Regulation (GDPR). That means you cannot capture audio data from your callers, for the purpose of creating voiceprints, without obtaining explicit consent from each user.

Getting that consent provides you with the opportunity to give specific guidance to each

user. As callers knowingly will be participating in the enrolment process, training the user to interact with the system will have a positive impact on future authentication results.

You should be explicit with your instructions and encourage behaviour that achieves the best results. Adapting your IVR to provide prompts to guide callers through the enrolment process is essential and providing users with a quick reference guide to that process also makes sense. Provide enough detail on the process so users understand the need to capture a good voiceprint, which conveniently can be used to verify identity in just a few seconds.

Users should be instructed to speak naturally at a conversational pace. As voice biometrics analyses numerous parameters of a person's speech, including pace, speaking consistently is necessary to ensure the system better differentiates correct users from impostors. Furthermore, the user needs to be somewhere they can speak where background noise is as low as possible. Background noise may lead to a false rejection.

Key benefits

Increased user satisfaction is one of the key benefits of voice biometrics solutions and illustrating the benefits will help to overcome any resistance to change on behalf of your users. Educate users on the benefits of voice biometrics, which include the following:

- The mitigation of fraud risk
- Speed and ease of use
- A reduction in call handling time
- Increased user convenience and satisfaction
- Avoiding the inquisition of security questions
- Better customer service

By acting on these tips, you will increase the effectiveness and efficiency of your speaker verification solution, and ensure both you and your customers realise the anticipated benefits.