



Remote Caller Authentication: Biometrics for the future.

What is voice biometrics and how does it work?

Voice biometric technology identifies the speaker by utilising their unique vocal characteristics such as pitch, speed, accent and dialect. This is similar to other well-known biometric technologies like fingerprint and iris scanning; however, it is the only practical means of authenticating a speaker over a remote channel i.e. when the individual is not actually present.

Voice Biometrics is different from speech recognition - it identifies and verifies an individual's identity – it is not about interpretation of the speaker's words. It is the only biometric that measures both physical and behavioural characteristics through a person's voice. In order to be able to authenticate a user first needs to enrol their voice.

Enrolment can happen in different ways:

- Inbound through an IVR
- Directly through a PC, Laptop or Mobile device
- Outbound through a focused campaign

Whatever the approach, the caller is prompted to repeat a specific sequence of numbers e.g. 1,2,3,4,5,6,7,8,9. The enrolment process is short, taking approximately 45 seconds to 2 minutes after which the voice is digitised, encrypted and stored in a highly secure 'voice bank'. Whenever a user phones in, the user's voice is compared to the stored voice 'print'. If it matches – the user is authenticated resulting in convenience and efficiency.

An essential requirement for the success of Voice Biometrics is ensuring that a speaker's claimed identity is actually their true identity before their voice is enrolled. This is referred to as the 'ground truth' and is an area that OneVault has significant knowledge and experience.

OneVault remains a proponent of multi-factor authentication, making use of both technological and tactical solutions to limit on-going imposter attempts.

Real-time Reporting: Authentication reports are accessible by selected individuals, anytime, anywhere. They are highly configurable and can be integrated into any system in real-time.

Caller Authentication Process





Remote Caller Authentication:

“The Power of Your Voice”

Key Business Benefits



- Customer authentication time is significantly reduced lowering call handling times and duration
- Caller Authentication can be automated reducing operating costs and streamlining resource requirements
- Streamlined resourcing requirements.
- Leveraging the OneVault hosted model, there is no need to develop and ‘tune’ your own voice authentication engine.



- Users/Customers are biometrically authenticated reducing Enterprise and Consumer risk
- Voice biometrics offers high availability - anytime, anywhere remote access.
- Eliminate collusion between ‘imposters’ and company agents.
- Complements internet security practices.



- Customers ‘control’ more of the authentication process resulting in faster, more convenient, secure authentication.
- The ability for customers to effectively ‘self-serve’ results in a far more favourable customer experience *vis a vis* holding in a queue.
- Is privacy-friendly.
- OneVault’s solutions can be integrated seamlessly with a company’s current customer contact management applications.
- The OneVault solution is compliant with PoPI, CPA, ECT.

What Clients have said about Remote Caller Authentication

“Customers are wary about giving personal information to agents as they are not sure how secure this process is. Being able to self- or pre-authenticate and eliminate the need for ‘secret questions’ gives customers a major sense of comfort. They feel that we take their identity and their security seriously and our brand reputation has been enhanced.”

“There are certain activities that lend themselves to self-service but the problem has been authentication. Now that we can implement multi factor authentication to address these call types or activities, customers are in control and they love it.”

“The positive impact on the customer experience has been startling.”

“Our Contact Centre costs have been increasing exponentially as more customers interact online and via voice channels. To be honest, finding opportunities to reduce costs in the call flow process has been very welcome and has delivered unbelievable business value, not only in pure quantitative costs but in a myriad of other ways as well.”

About OneVault

OneVault is a focused Voice Biometric Authentication company. We unlock the power of every individual’s voice to provide the most secure, remote authentication channel available.

- Our focus has allowed us to develop a set of core competencies and capabilities that are unparalleled in the South African market.
- OneVault offers our clients secure, easily accessible, multi factor authentication that seamlessly integrates with their IT infrastructure.
- OneVault’s hosted offering means our clients’ can leverage our ‘tuned’ voice authentication engine resulting in fast, simple solution deployment.

