

A person is shown in profile, holding a smartphone to their ear. The image is overlaid with a semi-transparent blue filter. A white horizontal bar is positioned across the middle-right of the image, containing the main title. Below this bar, a teal-colored horizontal bar contains the subtitle. The background is a blurred office or meeting environment.

Vocal Passphrase

Formant Information Technologies

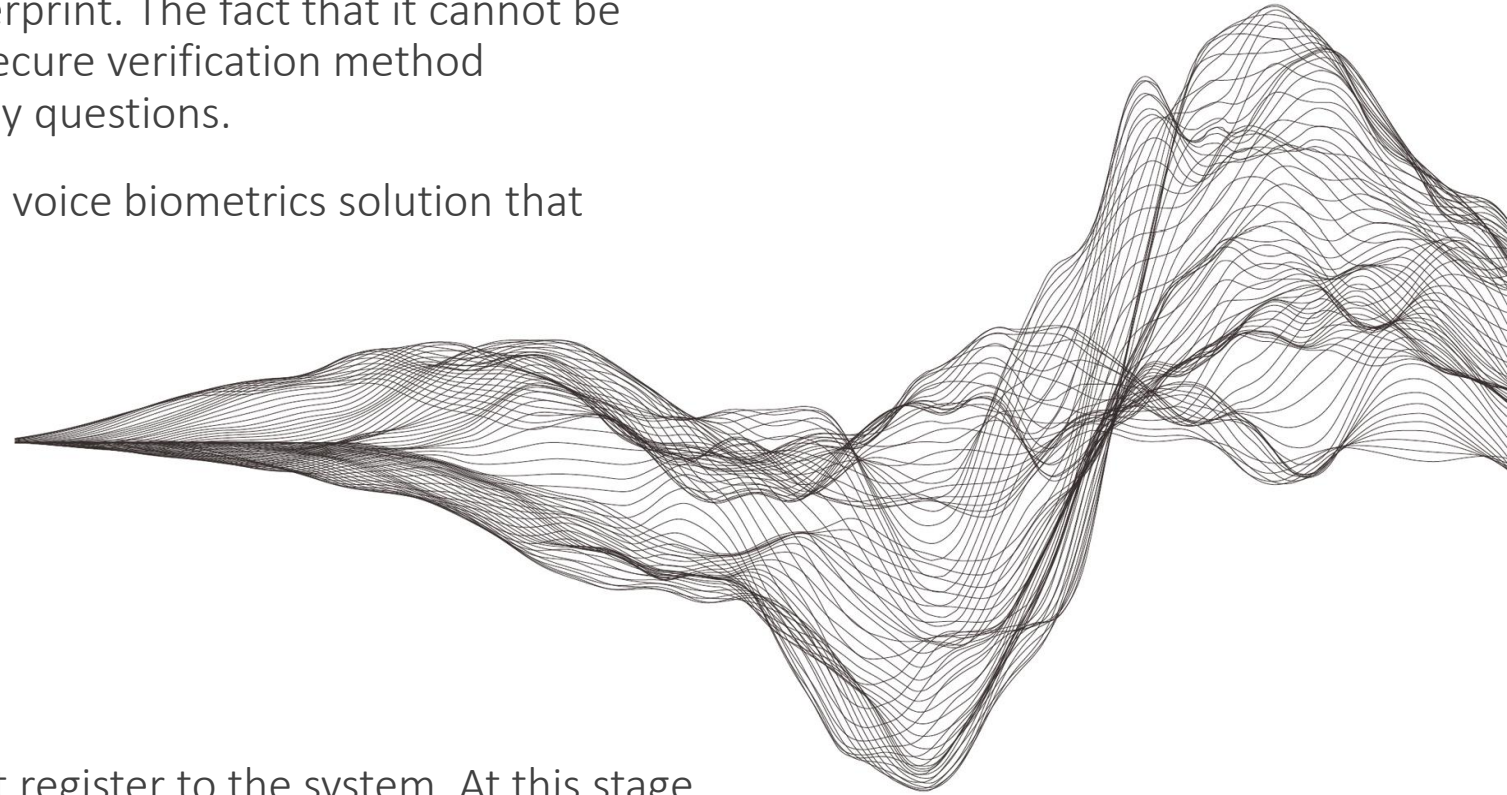
Fast and Secure Authentication

The human voice is as unique and personal as a fingerprint. The fact that it cannot be copied or forged makes the voice signature a more secure verification method compared to methods such as passwords and security questions.

Vocal Passphrase is a text-dependent dialogue-based voice biometrics solution that authenticates users through their voices.

Vocal Passphrase allows customers to go through a fast, effortless and secure authentication process by repeating a simple voice signature phrase. Unlike passwords, Voice Signature, which does not create problems such as being stolen, forgotten and expired, provides users with a practical identity verification that does not require sharing their personal information.

Users who want to benefit from this technology must register to the system. At this stage, users first create their voice signatures by repeating the voice signature sentence determined by the institution. In subsequent transactions, they can go through the verification process by saying the voice signature sentence once, without classical information confirmation.



Secure Biometric Authentication

Traditional methods such as passwords and security questions, which are at risk of being forgotten and stolen, may fall short in terms of security. This situation, which makes it difficult to protect from data breaches, increases security concerns. Unlike existing methods, Vocal Passphrase offers an effective security method with biometric authentication. Based on the principle that the human voice is unique and personal like a fingerprint, Vocal Passphrase allows users to go through a fast, effortless and secure authentication process by repeating a specific voice signature phrase.

Enhanced Customer Experience

Traditional security measures such as password and security questions as well as the possibility of being forgotten and lost; It causes customer dissatisfaction by wasting time. On the other hand, with Voice Signature, users can easily go through the authentication process by saying the voice signature sentence. Authentication with Vocal Passphrase consists of two stages. First, users repeat a certain voice signature sentence and record their voice signatures in the system. In the second stage, saying this sentence only once is enough for them to go through the authentication process.

Productivity Increase

Vocal Passphrase reduces the number of security steps in the authentication process. In addition, the authentication process, which takes minutes with existing methods, is completed in seconds with Voice Signature. This method, which shortens the call times, automates the identity verification process and reduces the need for customer representatives. Thus, productivity increase is achieved thanks to the reduction in operational costs.

Anti-Counterfeiting Tools

Vocal Passphrase is an effective solution to prevent fraud with its playback manipulation detection feature. It detects whether the captured sound has been pre-recorded or played. It also determines situations where fraudsters change a recorded voice sample with its synthetic voice detection feature. The voice change detector detects when the end user's voice has changed during the recording process. This both prevents some fraudulent cases and ensures the integrity of the created voice signature. In addition, brute force attack detection provides protection against system-wide attacks. The system provides control for known fraudsters using biometric blacklist identification during all transactions.

Multi-Factor Security

Vocal Passphrase increases the level of security by allowing the use of multi-factor security methods together. For example, Vocal Passphrase and Speech Recognition technologies can be used together. Thus, a two-factor security method is created for authentication by receiving personal information from the user with speech recognition technology.

Language and Accent Independent Structure

Vocal Passphrase authenticates the user without any language, accent or speech content restrictions. This feature, which means a practical use, offers companies flexibility. Thus, they can position the technology and make it available to customers, regardless of where they operate.

Adaptation Feature

The Vocal Passphrase technology keeps up to date with its adaptation feature. Thanks to this feature, the technology trains itself every time it is used and keeps the voice signature data used up-to-date. Thus, the technology continues to work perfectly despite the changes in sound over time.

Flexible Structure

Vocal Passphrase easily integrates into various systems thanks to its customizable API. Thus, companies can create a fast, easy and powerful security solution on their existing platforms and with the technologies they currently use.

Multi Channel Support

Vocal Passphrase supports a multi-channel service approach. By working integrated with different channels such as IVR, mobile and web, it enables customers to perform secure transactions in any channel they prefer.

Automatic Background Noise Level Detection

Background noise can make it difficult to hear a sound, to understand the expression. Vocal Passphrase automatically detects background noise levels and rejects recording when it detects a problematic sample. Thus, correct recognition and security for users in noisy environments is guaranteed.

Speech Content Validity Check

Conversation validation rejects all expressions that do not match the predefined generic passphrase. Thus, the quality of comparisons can be improved by clearing the entered invalid audio data.

Reporting Tool

Vocal Passphrase offers a detailed reporting feature. Call center security teams can receive detailed reports on authentication processes with the reporting tool. The reporting tool integrates with LDAP to provide easy login and authorization.

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