Bank Leumi transforms authentication.

Cost-effective, multi-factor authentication
used at one of Israel's largest contact centers.

Challenge
– 20-30 second AHT for
   authentication
– Manual authentication was
   time consuming, frustrating to
   customers and insufficient in
   security

Solution
– Nuance FreeSpeech™
   verifies a customer's identity
   in the background of a live
   conversation with an agent
– Nuance VocalPassword™
   automated authentication

Results
– Significant improvement of
   security and convenience for
   customer authentication

About the company
The First Direct Bank of the Leumi Group, one
of the largest banks in Israel, is known today for
its adoption of innovative advanced technology.
First Direct offers its customers remote banking
services via phone or the Internet, from any place
and at any time.

NUANCE

"Nuance offers an authentication solution that perfectly suits the security needs of our contact center. Our customers love the fact that they don't have to remember the answers to trick questions, like the fourth letter of their mother's maiden name, and we love the fact that the calls are shorter and totally focused on prompt banking transactions. Nuance's team provided us with exceptional support at every stage of deployment."

Amit Lanshiano, IT Operations Manager – LeumiCall
Bank Leumi's contact center.

The 'First Direct' challenge

Providing remote services demands advanced customer authentication procedures to ensure the security of private and sensitive information. The First Direct Bank, a member of the Leumi Group, was unsatisfied with its two-step authentication process using PINs and verification questions. The bank found that manual authentication was time consuming, frustrating to customers, and insufficient in guaranteeing security.

The verification questions constituted approximately 20-30 seconds of each call, and the First Direct Bank realized that the questions could be learned easily by an impersonator. First Direct turned to Nuance to increase security, enhance the customer experience, and improve contact center efficiency.

Nuance's biometric speaker verification technology

The First Direct Bank was interested in an innovative solution that would meet the needs of customers, save valuable time, and offer a cost-efficient alternative to its contact center operations. Taking these factors into consideration, First Direct approached Nuance to

replace its current verification process with an advanced voice biometric technology. First Direct chose to implement Nuance's FreeSpeech for its high-performance capabilities, its robust design, and its ability to overcome real-life conditions, such as calls originating from mobile phones and background noise.

How FreeSpeech works

FreeSpeech verifies a customer's identity in the background of a conversation with the contact center agent. One of the main benefits of this approach is that the process of enrollment and authentication is non-intrusive, prompt and transparent for both the customer and the agent.

In the enrollment stage, FreeSpeech creates a voiceprint for the customer while the agent continues to ask traditional verification questions. Once the voiceprint is created, the information is stored in a secure repository, and verification occurs automatically in every subsequent call.

"The use of voice biometrics for authenticating customers calling our contact centers is just a first step in the deployment of this exciting technology in our operations. We're certainly looking at this technology for future deployment in our mobile banking platform, as well at its applicability for securing high-risk Internet-based financial transactions. The fact that voice can be used across all the channels customers use to interact with us is a great advantage."

Amit Lanshiano, IT Operations Manager – LeumiCall
Bank Leumi's contact center

Today, First Direct customers who call the bank enjoy a more secure environment and a significantly enhanced customer experience. The reduced call duration improves the work efficiency of contact center agents, enabling them to provide prompt, quality service around the clock.

Effectively managing operational risks
International and domestic banking regulations published in recent years provide specific guidelines for effective risk management and recommendations for best practices in electronic and direct banking services. These regulations recommend adopting additional security measures to authenticate customers. In many cases, customers are required to answer a series of complicated questions regarding their accounts and recent transactions. However, such security measures are inconvenient and time consuming, both to the agent and the customer. More importantly, these measures do not always increase security levels. FreeSpeech is an ideal alternative to manual questioning procedures and provides First Direct with the highest level of security using its unique 'watch list' function. This provides

real-time alerts when a customer's voice resembles one of the voices in the watch list group (created from the recordings of imposters) as opposed to the voice of the actual customer. In such cases, the contact center agents are instructed to take additional security measures in order to confirm the speaker's identity.

The bottom line: success
The successful deployment of FreeSpeech in First Direct's contact center proved that there is no trade-off between security and convenience; in fact, both of these aspects were significantly enhanced. First Direct reported that FreeSpeech improved access to the bank and provided secure, convenient and more efficient services. Equally important was the immediate feedback provided by customers who expressed their satisfaction with the new verification procedure and the decision to eliminate the verification questions asked at the beginning of every call. First Direct also reported an improvement in contact center efficiency as FreeSpeech reduced the average call duration, strengthening its position as a cost-effective technology.
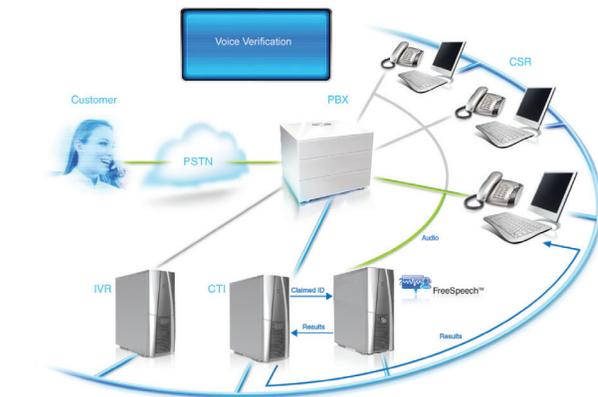
As soon as an agent tends to a customer's service request, a CTI event is received by FreeSpeech and the system begins recording the conversation. FreeSpeech's standard tapping hardware and front-end processing software isolate the customer's audio from the conversation and send it for processing in real time as the conversation takes place. Once enough audio is acquired, the system updates the CTI with verification results.

Verification results and scores are reported to the CTI and are linked to the call record. The verification scores provided by FreeSpeech enable CRM systems and other agent applications to perform effective risk management and blacklist checks. Therefore, when a customer's identity is verified by the system, there is no need for authentication questions. When a customer's identity is not verified, additional security measures, such as callbacks and enhanced verification routines, may be applied.

First Direct's plan is to remain at the forefront of technology in its efforts to provide the most secure, convenient and efficient services for customers.

Following the deployment of FreeSpeech in the First Direct Bank, Bank Leumi decided to deploy the FreeSpeech system in all of its contact centers. In addition to First Direct, LeumiCall, a 350-seat contact center situated in the outskirts of Tel Aviv and designed by IBM Global Services, now uses FreeSpeech to secure high-risk transactions, such as money transfers.

Ensuring business continuity
Bank Leumi of Israel continues to grow and enhance its services every year. In order to accommodate the growing use of its direct banking services, Bank Leumi developed yet another contact center that not only enables the bank to accommodate peak loads in its LeumiCall operations, but also serves as a backup site. This all-new VoIP-based operation built by IBM Global Services is Nuance's first VoIP FreeSpeech deployment. FreeSpeech VoIP is a software-only solution that can be easily plugged into a VoIP contact center, adding a new dimension of security and risk management capabilities. The two FreeSpeech systems deployed at Bank Leumi's contact centers are synchronized in real time using a unique Nuance solution.

Automating eBanking password resets with VocalPassword
Leumi continued to seek authentication technology to enhance the customer experience and enable automation of secured processes via its voice platforms. In late 2006, Bank Leumi selected Nuance VocalPassword for a unique, customer-facing pilot. The intent was to test the accuracy and user acceptance of text-dependent voice biometrics. The application selected for this pilot was eBanking password reset. The bank's contact center agents handle approximately 2,000 eBanking password resets a day. Each password reset call lasts approximately five minutes and consists of a long (manual) customer interrogation, after which the customer is routed to a voice application that enables the actual reset. The password does not allow third-party money transfers. During the course of a three-month trial, the bank enrolled nearly 10,000 customers by offering them the service prior to resetting their passwords. Approximately 2,000 actual resets were successfully performed during the testing phase.

Customers reacted positively when offered the service. They specifically liked the fact that they can reset their passwords 24/7 without waiting in queue for an agent. All calls going to the help desk were frontloaded with voice-based authentication, which enabled the customers to reset their own passwords or be transferred to an agent without the need for further authentication.

The future – mass deployment across all communication channels
Following the successful pilot of VocalPassword in Leumi's contact center, the bank acquired a site license for VocalPassword and plans to use text-dependent voice biometrics for all incoming calls (~40,000 a day). The default authentication procedure for Leumi customers calling in for service will consist of Caller Line Identification and a simple spoken pass phrase. When either of these methods fails, an additional secret pass phrase will be used. Other fallback mechanisms include the use of out-of-pocket questions, PINs and manual authentication procedures. The deployment of VocalPassword at Leumi (integrated with its existing WebSphere Voice Response system) will enable the bank to provide prompt, efficient and secure access to account information and transactions. Voice biometrics will trigger investment in further authentication of customers only when there is a clear indication that the caller's voice does not match his pre-enrolled voiceprint.

About Nuance Communications, Inc.
Nuance Communications is reinventing the relationship between people and technology. Through its voice and language offerings, the company is creating a more human conversation with the many systems, devices, electronics, apps and services around us. Every day, millions of people and thousands of businesses experience Nuance through intelligent systems that can listen, understand, learn and adapt to your life and your work. For more information, please visit nuance.com.

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