



case study ::



Home Credit Bank Deploys Automated Call Routing Using Nuance Speech Recognition

Over 85% of calls are successfully routed with the world-leading speech recognition solution

about the company



Home Credit and Finance Bank, Ltd. (Home Credit Bank) is a leading universal retail bank in Russia, with a 10-year history. The bank has implemented an innovative concept for the Russian market of a Financial Store, providing customers

with simple, fast and convenient financial products and services close to home. The essence of the concept is that the bank should be as simple, clear, fast, close, bright and convenient as a fast food restaurant.

Today, Home Credit is the third largest retail lender in Russia and the tenth largest retail deposit holder on the market. The bank's customer base is 24.3 million people. Home Credit products are presented throughout Russia in more than 64.5 thousand partner stores located in eight federal districts of Russia. As of September 30, 2012 the bank's regional network consists of 5,963 offices in various formats. Additional information is available at <http://www.homecredit.net/>.

Success Story At-A-Glance

Company:

Home Credit Bank

Business Challenge:

- Customers calling the bank had difficulty understanding the logic of the automated DTMF (tone dialing) menus and would choose to connect to agents instead of continuing to use the self-service solution, which increased service costs for the bank.

Nuance Solutions and Technologies:

- Nuance Recognizer, Nuance Vocalizer
Speech recognition technologies offer customers a definite opportunity to explain the reason for their call in their own words – and the calls are automatically routed to the appropriate self-service application or agent.

Results:

- Over 85% of callers are successfully routed to a self-service application or an agent using Nuance speech recognition technology.

the business challenge and solution



The previous process for servicing customer calls was not ideal for customers or optimally efficient for Home Credit Bank. All customer calls were received via an Interactive Voice Response (IVR) system and then, using the extension number tone dialing (DTMF menu), were forwarded to appropriate contact center agents or self-service applications. Home Credit statistics proved that customers often have difficulty understanding the complex logic of DTMF menus and tried to connect to an agent as soon as possible (up to 40% of cases). These agents then bore the additional load of forwarding calls to the correct group of contact center agents who can support their request or forward the call to automated services.

Another difficulty regarding DTMF menus could occur with the introduction of new products or changes to customer service business processes. In this case, bank specialists would need to add new menu items to the IVR, which could even be recorded with different voices than the existing menu. This would degrade the overall customer experience with the automated self-service system.

To better service customers across Russia, Home Credit Bank decided to develop interactive voice services using speech recognition technology. This aligned with the global strategy of the bank, aimed at the widespread introduction of innovative and automated customer care services, including Internet banking, mobile banking, client video consulting via the Internet, and online loan application filing. The new self-service system using speech recognition was intended to expand the Home Credit Bank's innovative service model.

choosing a supplier

Today there are very few vendors for speech recognition technologies for contact centers with support for the Russian language. The final vendor selection was influenced by the following factors:

- Technology customization to fit the exact needs of the bank;
- Quality of the solution and its functionality;
- Ease and speed of implementation;
- International market reputation.

Nuance Communications was selected to provide speech recognition for automated call routing. Nuance Recognizer is the world's leading product for speech recognition; it is able to recognize more than 80 languages and dialects and has been deployed in more than 150 applications worldwide, including those for international companies such as Barclays, ING, GE Money, Air France, US Airways, FedEx, Turkcell Global Bilgi, and Telefónica España.



project implementation

For a large retail bank, a project involving transitioning customers from a familiar though inconvenient DTMF menu to innovative speech recognition technology entails certain commercial and image risks. For this reason, Home Credit Bank decided to introduce the new technology gradually, carefully watching the customer reaction and quickly making the necessary corrections.

“The current strategy of Home Credit Bank is to advance into small Russian towns, where people are less willing to accept automated services than those in the capital. It was therefore necessary to think through the call scripts carefully, taking into account the mentality of small town inhabitants. For that, the IVR system must be clear and simple, and provide quick and easy access to the information requested by the client,” said Elena Efremova, Home Credit Bank’s Customer Service Project Manager.

Speech recognition implementation work was conducted in two phases. The goal of the first phase, lasting for about 3 months, was to build an automated information and reference service to provide bank office, branch and ATM addresses. Speech recognition capabilities are provided by Nuance Recognizer. The automated service includes multi-level caller prompting to confirm the details of the caller’s query (region, city, metro station, etc.). As the database of these addresses is constantly changing, Nuance Vocalizer text-to-speech synthesis technology was selected for sound playback.

01



PHASE 1

Bank office, branch and ATM addresses

02



PHASE 2

Main menu, intelligent call routing

The second phase of the project was implementing Nuance speech recognition at the main menu. Here, a single question dialogue between a customer and the IVR was implemented: callers are asked about and are offered to openly state their request and then be intelligently routed to the right location. Nuance speech recognition technology was integrated with the existing IVR on the Genesys Voice Portal telephony platform.

A very important part of the project, executing which demanded both expert and the bank’s involvement, was identifying the basic vocabulary that should be recognized. For a month, a small percentage of actual customer calls were transferred to a data acquisition system. The real conversations between contact center operators and customers were analyzed to identify the specific requests and words that customers would use.

“Nuance Recognizer significantly reduces the number of incorrectly routed customer queries in comparison to DTMF systems.”

The truly unique requests were then grouped and labeled. These labels, or tags, are attached to call routing rules. For each tag, at least 300 words and expressions have to be added to the system’s vocabulary. After the system’s launch, vocabulary fine-tuning was carried out.

In the process of analyzing the collected records, the bank receives a unique opportunity to see the whole picture of the clients’ requests and needs and can optimize the business processes for customer service. This provides a significant amount of savings for the contact center, by reducing the number of forced call transfers between contact center agents and in service time. It also improves customer satisfaction and loyalty.

“According to the statistics for the system, thanks to its ability to simply ask about the reason of the call and recognize what is being said, Nuance Recognizer significantly reduces the number of incorrectly routed customer queries in comparison to DTMF systems. It also reduces the average duration of a call to a customer contact center and significantly increases the number of calls handled in self-service mode, without a contact center operator involvement,” said Elena Efremova.

The main advantages of building an IVR system based on the Nuance speech recognition solution are:

- Saving resources and reducing operating costs for the contact center;
- Improving customer service quality and raising customer satisfaction;
- Easily integrating with existing contact center infrastructure;
- Having flexibility and adaptability to changing business processes;
- Leveraging Nuance’s extensive experience with the largest businesses around the world.

The duration of this phase to implement speech recognition at the main menu was also about 3 months. The bank implemented the solution in stages to evaluate and assess its impact.

“Natural speech recognition system was a radically new technology for us,” says Elena Efremova. “We needed to evaluate possible risks of its introduction to the client experience. So at first we made the decision to move 8 regional phone numbers to the speech recognition platform without affecting the Moscow regional and Federal lines of our contact center.”

project results

Callers can now ask their question in a natural way instead of going through the multi-level DTMF menu to reach the information needed. Statistics show that every tenth call entering Home Credit Bank call center is serviced by Nuance speech recognition.

Some statistics for queries processed by the speech recognition solution include:

- Over 85% of callers, once they announced a reason for the call, are automatically switched to an appropriate operator group or a self-service section;
 - About 45% of customers are calling for telephone banking information and are automatically transferred to the self-service menu;
 - Approximately 3% of callers turn to the contact center to find a most convenient bank office or ATM; they are automatically routed to this service to be provided information in an automated mode;
- The rest of the customers are routed to the relevant operators as their enquiries require a customer care agent.



Over **85%** of callers, once they announced a reason for the call, are automatically switched to an appropriate operator group or a self-service section.

further plans

The project was successfully completed and Home Credit Bank continues to examine the prospects of further use of speech recognition for customer service. An integrator trained the bank's IT professionals and continues to provide support. Thanks to the openness of the speech recognition solution development platform, any change in the voice service menu (i.e. as a result of new banking product offerings) can now be made by the bank itself.

Further plans to use Nuance speech technologies by the Home Credit Bank include:

- Connection of the federal toll-free 8-800 code number to the platform;
- Closer integration with existing platforms and emerging banking services in order to provide them in a self-service mode.

In addition, other bank departments, not directly engaged in customer service, are considering the use of voice recognition solutions to improve their business processes. In particular, the bank's collection service intends to include the Nuance Vocalizer text-to-speech technology for calling customers with late payment reminders.

"We were pleasantly surprised by the quality of the speech recognition from Nuance," said Elena Efremova. "If at first we treated it as an interesting experiment, it is now clear that this is a real working technology, opening up new opportunities for our business."

"Having integrated speech recognition by Nuance, we can now see how the technology can really help our contact center to automatically handle incoming calls routing. First, this helped us to reduce incoming calls duration and handle them with better accuracy; second, it reduced contact center staff workload and dramatically increased the level of automation."

– Elena Efremova,
Customer Service Project Manager

for more information

To view more case studies, videos, and what Nuance customers are saying, visit our [Customer Success web site](#).

about Nuance Communications

Nuance Communications, Inc. (NASDAQ: NUAN) is a leading provider of voice and language solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with devices and systems. Every day, millions of users and thousands of businesses experience Nuance's proven applications. For more information, please visit www.nuance.com/go/care.