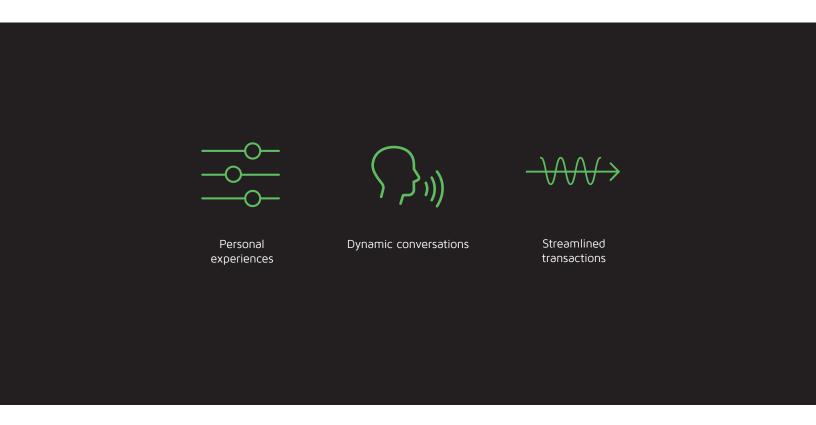
# Why banking virtual assistants need to function like a bank teller.



# An AI innovator explains how conversational AI fosters positive customer experiences.

Dr. Yunqi Zhang, one of Clinc's founders, leads the way in refining conversational AI to a level of sophistication and intuition that elevates it to an almost human-like exchange. Recognized in both academia and industry, Zhang's cutting-edge research has pushed forward advanced conversational AI technology in place at Facebook and Microsoft.

Online banking began to materialize with the advent and growth of the internet in the mid '90s. Until that time, bank customers simply verbalized their request to the teller at the drive-thru or inside the bank. The teller subsequently handled the request and performed the necessary transaction. Customers just had to speak their requests. The teller listened and acted.



"When you talk to the teller at the bank face-to-face, you don't worry about how the other person is going to interpret your message. You don't have to understand the bank teller. Instead, they have to understand you," says Zhang. "That is why some people have a hard time navigating in this digital age, simply because they are now responsible for a part of the task that used to be handled by the bank tellers."

According to Zhang, online customers don't know where to click and they worry about clicking on the wrong button and landing on the wrong page, which is largely a byproduct of how interfaces are designed. Zhang likens online navigation to a tree of multiple decisions that a user has to make to reach the final page to conduct the transaction. Every previous decision must be correct to accomplish the task.

While one study showed 71 percent of respondents as favorable to artificial intelligence in banking, 24 percent weren't so sure and almost 5 percent were opposed to it altogether.

Forbes blogger Ilker Koksal notes that banking services promote a much higher level of complexity than ordering a pizza, so banking virtual assistants require advanced natural language processing and machine learning technology for a more personalized customer experience.

"A superior approach is flattening the navigation tree. Instead of a customer having to find the entry point and understanding the system, the system understands the customer simply by their verbal request," explains Zhang.

He points out that a superior virtual assistant should be like a bank teller embedded in the digital experience. In fact, when Clinc launched its first virtual assistant, it discovered the most engaged users were older in age. They found that talking to Clinc's virtual assistant provided a positive banking experience very similar to what they were familiar with—bank tellers at their local branch offices.

### How to create a virtual assistant that functions like a bank teller.

Users want efficiency in their banking experience. Reduce the number of steps users need to take to achieve their goal. Saying "Transfer \$20 from my checking account to John's" is more expedient than clicking through several drop-down menus and checkboxes.

#### Introduce virtual assistants in more complex interfaces first.

For example, a wire transfer requires numerous digital steps to complete on mobile banking sites. Here a virtual assistant could just receive the request "Wire \$30 from my checking account to John's next Tuesday" and the transaction would be complete.

Eliminate virtual assistants who only replicate the complexity of standard user interfaces. These virtual assistants use voice but provide the identical complexity by asking the user for source account, target account, money amount and date of transfer.

Create personalized virtual assistants. These virtual assistants access financial and transactional history of the user to provide the most accurate answer. If a user asks, "How much did I spend at Westside last month?" the virtual assistant knows the user is referring to a specific restaurant located where the user lives and frequents.

Correct wrong information or impossible transactions immediately. Like a bank teller, a virtual assistant should immediately notify the user if a requested transaction is not possible or a piece of information is incorrect rather than waiting until the conclusion of the transaction. This will force the user to restart the process from the beginning.



## How to guarantee a personalized and responsive user experience.

Zhang offers a few tips to find the most likely intention of the user and enable dynamic real-time conversations. "Apply artificial intelligence and machine learning techniques on both the user utterance and the transactional history of the specific user, and dynamically map those together," says Zhang. "Provide a flexible integration interf ace that allows the business logic to verify the validity of the information provided by the user dynamically as the conversation progresses. If the user asks to transfer \$500 from his account, the virtual assistant will immediately let him know that he only has \$200 left in his account and at that moment the user can correct the error."

Koksal recommends choosing a vendor who can build your virtual assistant with sophisticated banking industry expertise and then train it with the extensive financial expertise needed to communicate with customers.

## Create your responsive (and virtual) bank teller.

Take the pressure off the user and place the onus on your conversational virtual assistant to navigate the complexities of banking. This empowers your customers to experience a streamlined online banking experience as easy as talking to a local bank teller.

Clinc serves the banking and finance industry with voice-first conversational AI that allows for user error, unfamiliarity with the interface, and dialectic language differences allowing for greater user ease and success. Clinc's large number of patents reflects the groundbreaking level to which Clinc's fintech AI leads the industry in refining and improving the online banking experience.

## Start the conversation.

Clinc's revolutionary conversational AI has been proven successful at the biggest banks worldwide. The best-in-class platform utilizes natural language processing that understands how people really talk, powering exceptional customer experiences that build loyalty and generate ROI. When you're ready to start unlocking the possibilities for your bank, Clinc is here to help.

More at clinc.com.

