





USING CONVERSATIONAL AI TO INCREASE CUSTOMER SATISFACTION AND RETENTION

### Introduction

As technology advances and improves, more businesses in the mortgage space can be expected to embrace digital tools and solutions. In addition, customers are increasingly interested in self-serve options, especially when it comes to customer service. One technology that is seeing an increase in use and demand is conversational AI, or chatbots, particularly the deployment of chatbots for customer service.

According to Salesforce's "State of Service" survey of 3,500 customer service professionals worldwide, 53% of service organizations expect to use chatbots within 18 months – a growth rate of 136%.<sup>1</sup> And research from Gartner predicts that by 2022, 85% of customer service interactions will be conducted by chatbots.<sup>2</sup>

Businesses seem ready to adopt this technology to scale their customer service, but what about consumers? How will this affect how they feel about their experience? Surprisingly, they may not even notice. For example, in a recent study conducted by PwC, 27% of consumers reported that they weren't sure whether their most recent customer service interaction was with a human agent or a chatbot.<sup>3</sup> In addition, 62% of those surveyed said they believe the use of AI such as chatbots can help reduce the time it takes for them to get answers while still being highly tailored to their personal preferences.

This technology is coming online at the same time that the loan servicing sector of the mortgage industry is struggling with customer retention. According to data from Black Knight's "Mortgage Monitor October 2019 Report," post-refinance retention rates were down to 22% in Q3 2019. Servicers retained only 26% of rate/term refinance borrowers in Q3 2019, down 3% from 29% retention in Q2 2019, and cash-out borrower retention was down to 19% in Q3 2019.<sup>4</sup>

These low retention rates reflect the overall dissatisfaction consumers have with their mortgage servicers. According to the J.D. Power "2019 U.S. Primary Mortgage Servicer Satisfaction Study," mortgage servicers have some of the lowest customer satisfaction and Net Promoter Scores (NPS) of any industry group that J.D. Power studies.<sup>5</sup> In 2019, the industry average for overall satisfaction with mortgage servicers was 777 on a 1,000-point scale, and the average NPS for primary mortgage servicers is 16, one of the lowest of any industry studied by J.D. Power.

However, there are ways that servicers can improve their customer satisfaction – and, as a result, retention. The same J.D. Power survey showed that overall customer satisfaction is highest among servicing customers who use digital self-service channels to access information. Conversational AI and chatbots are a great opportunity to provide customers with a self-service portal for customer service questions, and servicers who take advantage of this technology can see increased customer satisfaction and retention.

This white paper outlines how servicers can use conversational AI to increase customer satisfaction and retention.

## **Conversational AI and chatbots**

Chatbots are a software application service powered by conversational artificial intelligence and machine learning. These bots are designed to use messaging and AI to converse with humans and automate repetitive tasks.

The goal of customer service chatbots is to engage with customers via messaging or chat systems in order to take on simple questions, thus allowing human customer service representatives to handle more nuanced, complex problems and tasks. Using chatbots for basic customer service provides an opportunity for businesses to improve operations and the customer experience they provide without adding more full-time employees. This is one way the use of chatbots can help businesses reduce costs, which Juniper Research estimates at more than \$8 billion saved by 2022.<sup>6</sup>

If human representatives know that simpler or more repetitive tasks are being handled by the chatbots, they can direct their time and energy to more difficult, higher-level problems and tasks. Combining technology and human ability leads to increases in speed, efficiency and customer retention and satisfaction. In addition to improving business operations, the use of conversational AI and chatbots provides a great training opportunity for agents, furthering the opportunity to grow and enhance customer satisfaction. For example, Sutherland Labs has partnerships with both Google and Augment CXM that allow Sutherland to analyze agent conversations with customers and provide feedback for improvement. The real end goal of this analysis is to improve agent performance and increase satisfaction with the customer service experience in order to retain current customers.

With its Google partnership, Sutherland Labs is able to analyze an entire conversation between an agent and a customer. Based on the analysis, Sutherland can provide feedback on a per-agent basis to guide them on how to better handle future calls.

Sutherland's partnership with Augment CXM, a provider of AI-powered management tools for contact centers, has resulted in Sutherland CXi, an AI-driven solution that is able to observe patterns, predict outcomes and provide real-time guidance to agents to improve their interactions with customers.





The Sutherland CXi application scans every agent-customer interaction in real time, across all channels. With the scan, it's able to predict which interactions between agents and customers are likely to lead to negative outcomes. Sutherland CXi also provides agents with insights gained from other agent-customer interactions and gives them tips to help them select the most appropriate path for the customer.

Chatbots also help improve the customer experience, both in terms of satisfaction and retention. In its "State of the Connected Customer" survey, Salesforce found that customers are increasingly interested in chatbots as a customer service option, particularly as their exposure to them grows. In that survey, 54% of customers said that companies need to transform how they engage with them and 58% said that emerging technologies like chatbots have changed their expectations of companies. In fact, when given the choice between filling out a website form or getting assistance and answers from a chatbot, 86% of respondents in the Salesforce survey said they would choose the chatbot.<sup>7</sup>

Chatbots are clearly winning over consumers. In tests and implementations of its AI tools with various brands, Augment has shown that clients typically see an increase in their NPS/CSAT scores, with improvements ranging from 10-15 points.

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## **Chatbot development and rollout**

The Sutherland Chatbot Solutions team works with its clients at a high level to take them through the process of developing and implementing their tailor-made chatbot solution, from the initial design stages to continuous optimization. In this section of the white paper, we will walk through the stages of development the Chatbot Solutions team typically follows, with more detailed examples from Sutherland's partnership with their client The Money Source (TMS), whose Sutherland-developed chatbot solution rolled out in early December 2019.

The Sutherland Chatbot Solutions team can develop preliminary functioning prototypes in just a few weeks. Full system integrations, including CRM, authentication and backend integrations, tend to require one to three months, depending on the complexity of the chatbot and the system and resources that the client has available.

### Discovery

In the discovery phase, Sutherland Labs works with clients at a high level to dissect current call patterns, asking questions such as:

- What kind of customer service calls are you receiving the most frequently?
- What kind of questions do customers have?
- During which times of the month are you experiencing the highest volume of calls?

This phase also includes research into client and customer pain points to identify opportunities where use of a chatbot could improve the process. For TMS, the majority of their calls were related to payment and escrow and took place around deadlines for payment. They wanted to offer customers a self-service option to handle frequently asked, simple questions that were coming in in high volumes and allow their Customer Care team to handle higher-level problems. Based on customer reviews, their pain points and opportunities for improvement included the following:

### Pain Points:

- Issues with processing payments
- Reports of repeatedly lost paperwork
- Customers expected fast responses via email
- TMS does not work around customers' schedules for inspections
- Issues trying to cancel recurring payments

### Opportunities:

- Process payments immediately
- Offer better calendar scheduling by allowing users to self-select times
- More transparency with graphs/charts
- Expedite communication responses
- Confirm payment processing
- Allow easy cancellation of payment



Once the chatbot development team has worked through this stage, they're better able to empathize with the customer experience and understand the problems present. The team then works to identify the goals of the chatbot for the user and the business – in other words, who are they designing this for? In what context and for what purpose will this chatbot be used?

TMS wanted to build the TMS Carebot, with goals that included: reducing cost by 30-50%, reducing call center volume by 30%, and scaling operations and customer happiness. As TMS grows, the company continues to look for ways to reduce its cost-per-loan in servicing.

The TMS and Sutherland teams wanted the TMS chatbot to help "current and future homeowners looking to own a piece of the American pie." The chatbot would assist customers with questions about their mortgage, payments, account or disaster relief help. In addition, the Carebot would be named Joy, after the company's mission to "grow happiness."

As part of this stage, TMS and Sutherland also defined measures by which they would assess the chatbot's success, including empowering customers with self-help options and reducing handling time by using a triage system to streamline the process. The team also aimed to reduce costs by 30-50% by automating Tier 0 and Tier 1 support issues, and by better qualifying and routing escalations.

#### Scripting

The Chatbot Solutions team's next step is to design and script the overall experience for the customer who will interface with the bot. During this stage, Sutherland Labs uses journey-mapping to get a comprehensive look at the current customer experience and storyboarding exercises to visually plan out the experience a customer will have with a customer service chatbot in different scenarios.

The storyboarding exercise Sutherland Labs conducted with TMS included the end-to-end customer experience, API integration and handoff of the customer to a live, human agent where necessary. Using flowcharts, the team laid out the process through which the customer will interface with the bot, from Entry, Answer, the Post-Answer options and the Outro. The Entry section includes NLP input and a menu for interaction, which leads to the chatbot providing an Answer to the customer's question.

After the chatbot provides an answer, there may be an opportunity for Post Answer options, such as step-by-step instructions for the chatbot to walk the customer through a process, related topics or a transfer to a live agent. The Outro step includes an opportunity to assess the customer's CSAT, as well as address any other concerns they may have had and allow for feedback.





During this phase the Sutherland team also charts out the Live Agent Transfer process, examining in which scenarios and how the chatbot would hand off a customer to a live agent if an escalation is needed. TMS chose to integrate their live chat agent transition within the TMS Carebot's user interface – the agent joins the customer's chatbot experience and takes over the conversation, providing a warm handoff from the chatbot and a personalized experience for the customer.

In the process of its collaboration with Sutherland Chatbot Solutions, TMS and the chatbot team also identified four types of live agent transfer scenarios: two that were dependent on TMS policy and technology and two that are addressable by Sutherland. The first two transfer scenarios are BusinessDesigned, in which an agent must become involved by design, e.g. the refund process requiring an agent, and Need-MoreHelp, in which the bot's instruction did not work and the chatbot suggests speaking to an agent. The two scenarios that were labeled addressable by Sutherland's team are ExplicitRequest, in which the chatbot user directly requests to speak with a live agent, and UnrecognizedNLP, in which the customer has input the bot cannot understand.

#### Building

Once the team has planned out the customer experience and scripted the chatbot, the development moves into the building stage. The team codes and programs the chatbot to handle the scripted series of questions and trains it in natural language processing.

During this stage, the team builds multi-level authentication into more transactional interactions between the chatbot and the customer. If, for example, the customer wants to upgrade their plan, the chatbot will require them to provide their login in order to verify their identity and ensure data privacy.

### **Testing and launch**

After the bot's initial coding and programming has been implemented, it's time for the chatbot to be tested. Sutherland's Chatbot Solutions team tests the chatbot both with the client in a live environment as well as behind the scenes. There is testing and peer review as well as quality assurance testing to make sure questions are being answered correctly and customers are transferred to a live agent when necessary.

Once the tests are finished, the chatbot code is pushed to production, after which it is implemented.

TMS's Carebot, Joy, was tested in a beta environment for about a week. On one end, testers worked to check the technology – scrubbing the code for bugs and trying to break it in order to find weaknesses. Another group of testers posed as customers using the bot, asking it questions based on a practice TMS account that was mocked up to see if the chatbot delivered the correct answers. Notes were taken on what was and was not answered correctly, changes were made and the bot was tested again. Because the Carebot uses natural language processing, the TMS testers even took into account different words and phrases that customers could potentially use, asking the same questions in a variety of ways to test whether the chatbot could understand.

Once the TMS Carebot had been thoroughly tested, it quietly went live as scheduled on Dec. 2.



## **Outcomes and benefits**

TMS does not yet have extensive data on its CSAT and NPS changes, but even in a short period of time, the company has seen benefits. In the time since its launch, the TMS Carebot has been handling about 3.5 times the volume of customer questions that the company's Customer Care agents would normally experience.

Customers have also provided very positive feedback on their experiences with the chatbot. TMS has already received calls from customers who wanted to contact someone at the company to let them know that they liked the chatbot and were able to get the information and help they needed more quickly via the chatbot than via traditional customer service channels like calling.

In addition, the TMS Carebot has helped the TMS team recognize where its customer service scripts need adjustment. Because the bot uses the same script as the live Customer Care agents, if a customer interfacing with the chatbot doesn't understand an answer, it can indicate that the script may need changes across the board in order to improve customer understanding and satisfaction.

# Conclusion

As customers continue to expect more digital, self-serve options in their interactions with businesses, servicers can take advantage of chatbot technology to improve their workflow, increase satisfaction and retain more customers.



### Sources

- 1. https://www.salesforce.com/blog/2019/08/chatbot-statistics.html
- 2. https://www.sutherlandglobal.com/our-thinking/human-or-bot
- 3. https://www.pwc.com/us/en/industry/entertainment-media/publications/consumer-intelligence-series/as sets/pwc-botme-booklet.pdf
- 4. https://cdn.blackknightinc.com/wp-content/uploads/2019/12/BKI\_MM\_Oct2019\_Report.pdf
- 5. https://www.jdpower.com/business/press-releases/2019-us-primary-mortgage-servicer-satisfaction-study
- https://www.juniperresearch.com/researchstore/innovation-disruption/chatbots/subscription/
  banking-ecommerce-retail-healthcare?utm\_source=juniperpr&utm\_campaign=chatbots2017pr1&utm\_medi
  um=email
- 7. https://www.salesforce.com/blog/2019/08/chatbot-statistics.html

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