



**TRANSFORM
MORTGAGE SERVICING
WITH
CONVERSATIONAL AI**

Introduction

With the accelerating pace of change in the mortgage industry, servicing needs a new way to build stronger customer relationships. Digital engagement in mortgage servicing is central to a customer experience (CX) strategy.

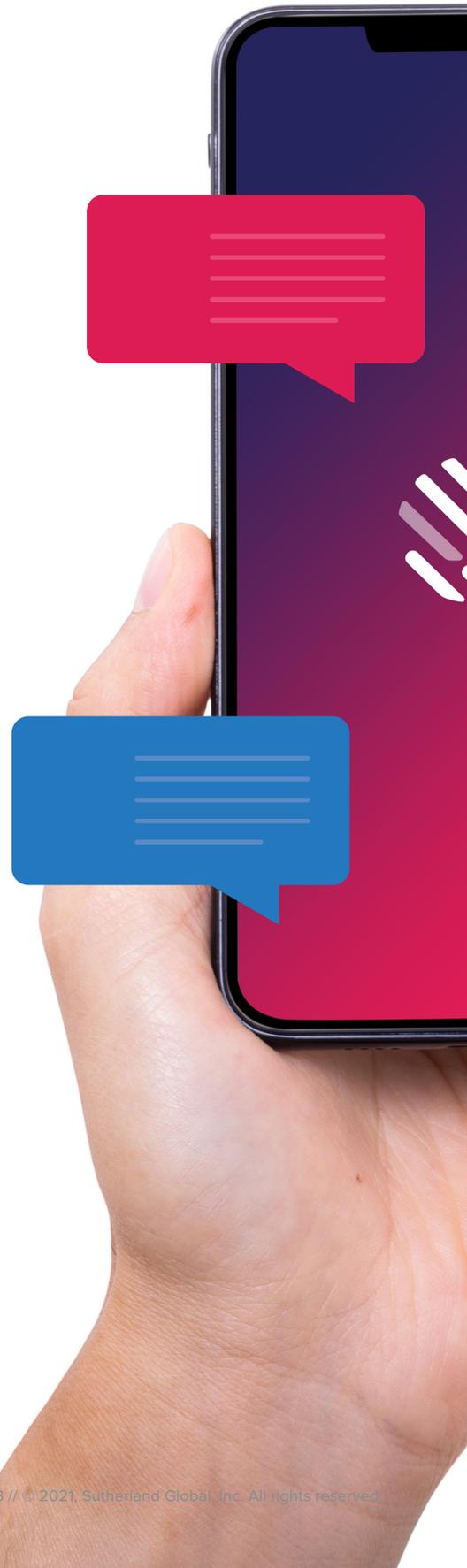
Borrowers increasingly prefer self-serve options since it saves them time and leads to a better overall experience. Customer facing chatbots based on conversational artificial intelligence (AI) are increasingly used by mortgage servicers. It provides borrowers an opportunity to connect instantly, seek information fast, and—often—find a solution within minutes. In a 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 chatbot¹. The conversational AI market is now exhibiting strong growth and is expected to reach US\$23 bn in 2027².

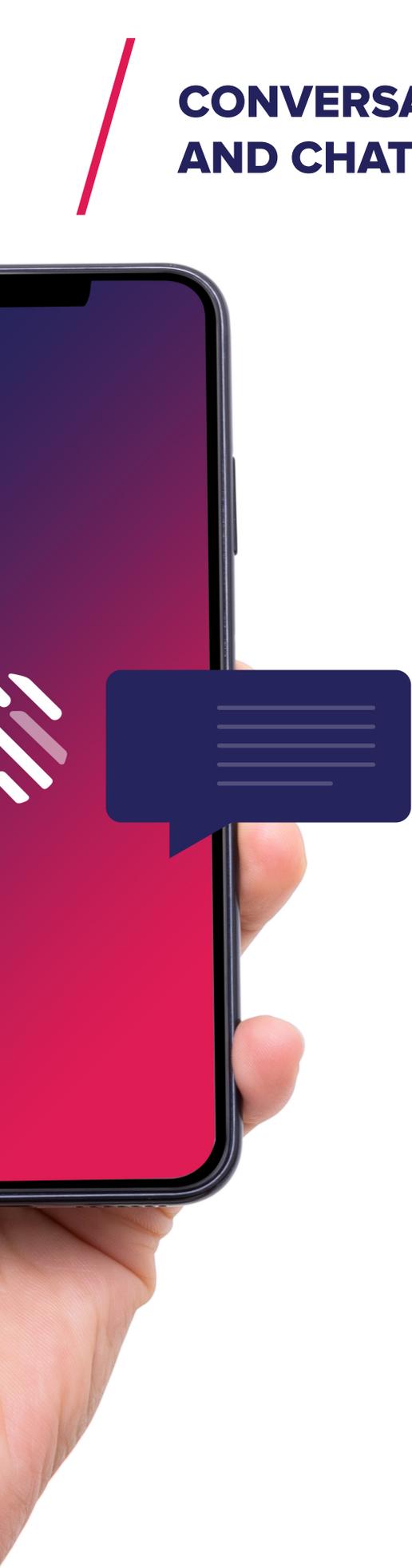
This technology is evolving at the same time as the loan servicing sector of the mortgage industry is struggling with customer retention. According to data from Black Knight's Mortgage Monitor in Q4 2020, retention of refinancing borrowers remains at record lows, with just 18% being retained by their servicers³. These low retention rates reflect the overall dissatisfaction consumers have with their mortgage servicers.

According to the J.D. Power, the COVID-19 pandemic has amplified the gaps in digital experience and call center experience. The study indicates that 45% of customers who visit their servicer website are unable to resolve their issue and end up resorting to contacting an agent by phone⁴. And nearly one-fifth of customers do not find the process easy⁵.

Despite these challenges, there are ways that servicers can improve the customer experience—and, by extension, customer retention rates. The arrival on the scene of more developed conversational AI and chatbot technology is a great opportunity for mortgage servicers to provide customers with a self-service portal they can rely on.

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





CONVERSATIONAL AI AND CHATBOTS

Chatbots are a software application service powered by conversational AI and machine learning (ML). 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 2022.⁶

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, 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 partnered with both Google and Augment CXM. Sutherland analyzes agent conversations with customers and provides 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.

Sutherland Labs analyzes entire conversations between an agent and a customer. Based on the analysis via Google, Sutherland provides feedback on a per-agent basis on how to better handle future calls. By partnering with Augment CXM, a provider of AI-powered management tools for contact centers, Sutherland developed 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 – Sutherland Conversational AI.





Sutherland Conversational AI... is able to predict which interactions between agents and customers are likely to lead to negative outcomes.

Sutherland Conversational AI 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 Conversational AI 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.⁷

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



CHATBOT DEVELOPMENT AND ROLLOUT

The Sutherland solutions team works with its clients 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 solutions team can develop preliminary functioning prototypes in just a few weeks. Full system integrations, including CRM, authentication, and back end 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 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. The team then works to identify the goals of the chatbot for the user and the business – in other words, for whom are they designing? In what context and for what purpose will this chatbot be used?

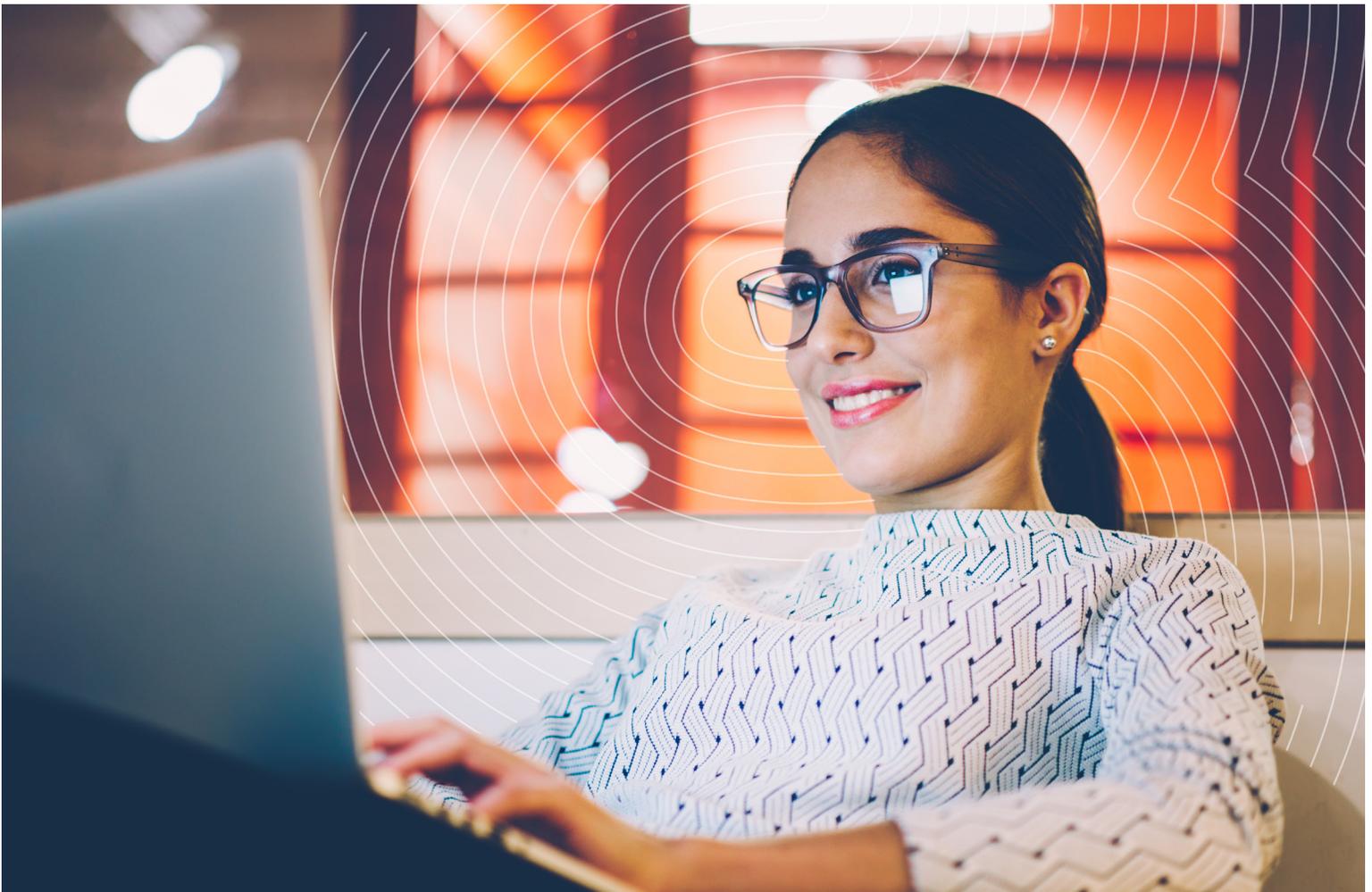
TMS wanted to build the TMS Carebot with goals that included: reducing cost by 30-50%, reducing call center volume by 30%, and scaling operations and customer happiness. As TMS grows, the company continues to look for ways to reduce its cost-per-loan in servicing.

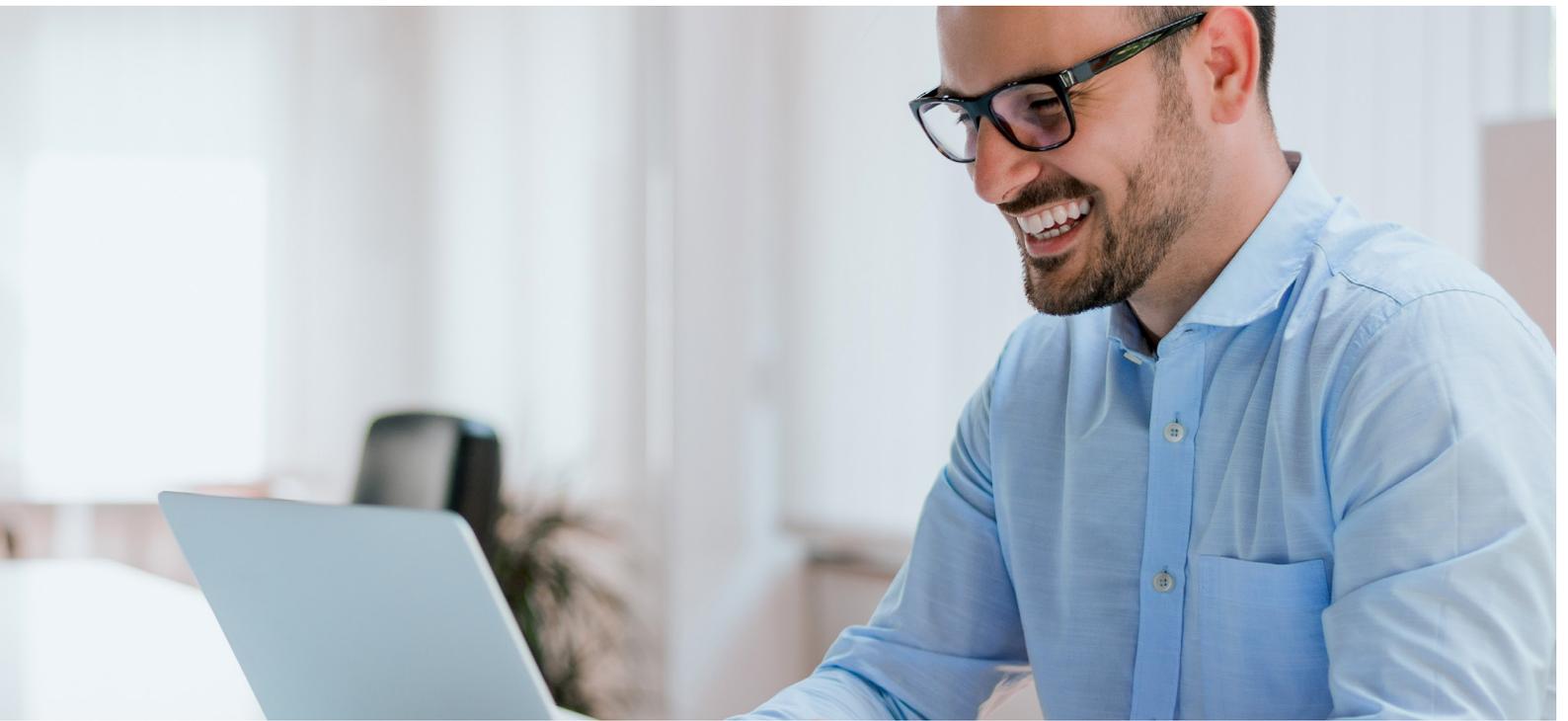
The TMS and Sutherland teams wanted the TMS chatbot to help **“current and future homeowners looking to own a piece of the American pie.”** The chatbot would assist customers with questions about their mortgage, payments, account or disaster relief help. In addition, the Carebot would be named Joy, after 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 selfhelp 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 Sutherland 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 (Application Programming Interface) 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 (Neuro Linguistic Programming) 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 final 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 escalate a customer to a live agent if 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 hand-off from the chatbot and a personalized experience for the customer.

In the process of its collaboration with Sutherland, 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 business designed, 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 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 December 2, 2019.

OUTCOMES AND BENEFITS

Even in a short period of time, TMS 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.

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We are a global products and platforms powerhouse inside a trusted digital transformation services company. Our mission is to deliver exceptionally engineered experiences for both customers and employees today, that continue to delight tomorrow. For over 30 years, we have delighted and cared for our customers' customers across all industries building integrated cloud-based solutions to accelerate growth. We are a team of global professionals, operationally effective, culturally meshed, and committed to our clients and to one another. We call it One Sutherland.