

FIGHTING A MORTGAGE CRISIS WITH CONVERSATIONAL BOTS



The U.S. CARES Act was designed to help mitigate widespread job loss created by the COVID-19 pandemic. The complexity of the legislation often sends homeowners to the banks for answers, particularly related to mortgage forbearance. However, mortgage providers have struggled to keep up with the extraordinary call volumes. Increasingly, advanced chatbots — not often used in the mortgage industry — can now answer customer questions and ease employee workloads.

The COVID-19 pandemic forced U.S. unemployment rates to levels not seen since the Great Depression.¹ The federal government's response was the country's largest ever stimulus package — a \$2.2 trillion bill known as the Coronavirus Aid, Relief, and Economic Security (CARES) Act.² The economic package provided relief for many homeowners, including mortgage forbearance for as long as 360 days and foreclosure moratoriums.

To receive those benefits, financially distressed homeowners, often unemployed or furloughed, must opt in with their mortgage servicer. However, navigating that complex legislation hasn't always been easy — on either side of the mortgage.

A majority of bank branches closed temporarily due to lockdowns or, in some cases, permanently. With branches largely inaccessible, contact centers have been flooded with emails and phone calls about the CARES Act as well as the high volume of routine customer questions.

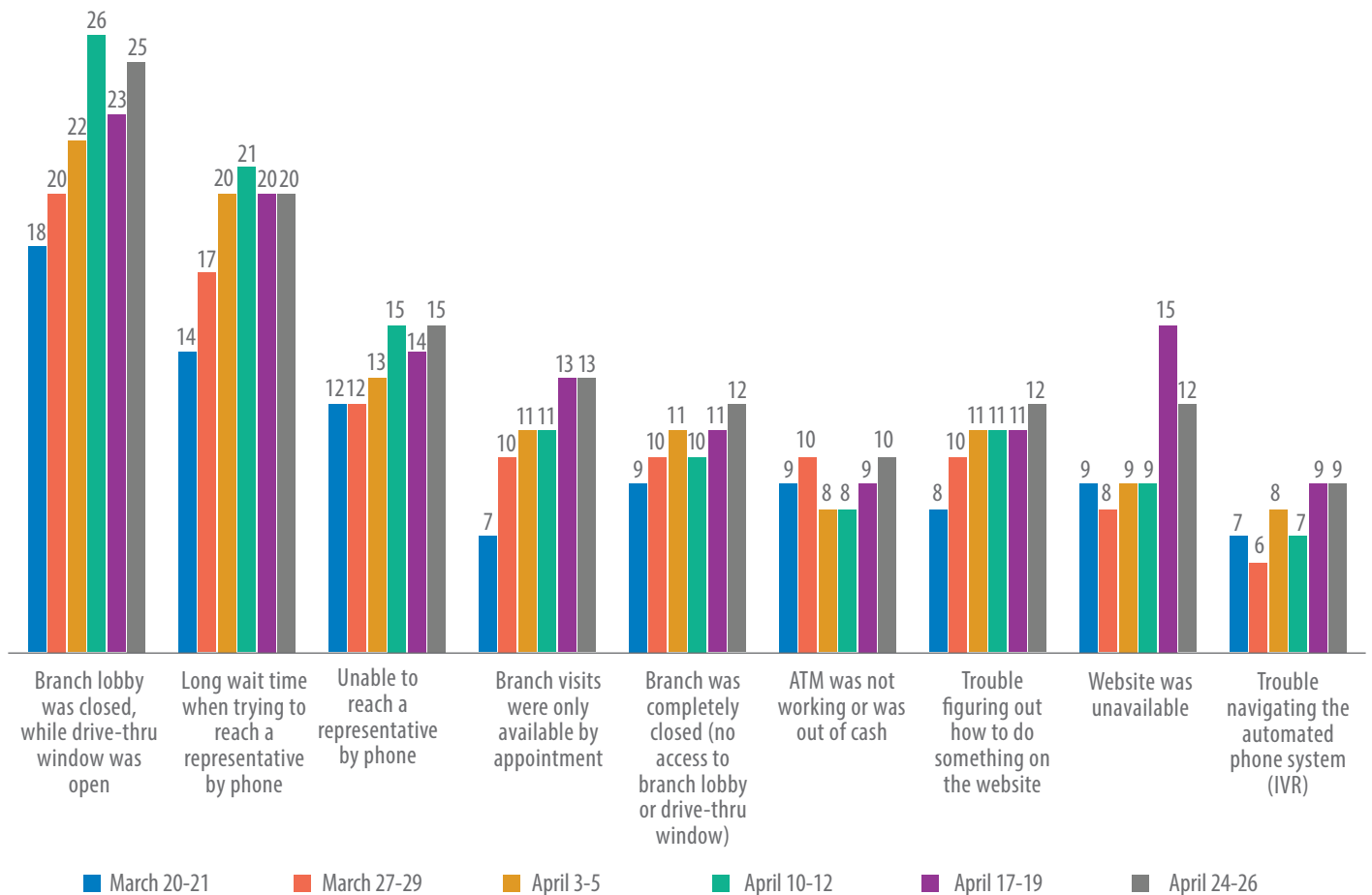
These overworked and sometimes short-staffed contact centers have become bottlenecks in the CARES Act process as backlogs build. Often, customers drop out of the call in frustration with long wait times. According to surveys conducted by J.D. Power, the percentage of customers unable to reach a representative or having to wait a long time increased from 26% in March to 35% in late April.

Many feel as if the contact centers are uncontactable.

This growing consumer frustration with the CARES Act, often with how banks are managing these new rules, is showing up in federal statistics. Mortgage complaints to the U.S. Consumer Financial Protection Bureau have increased nearly 40% since the end of 2019.

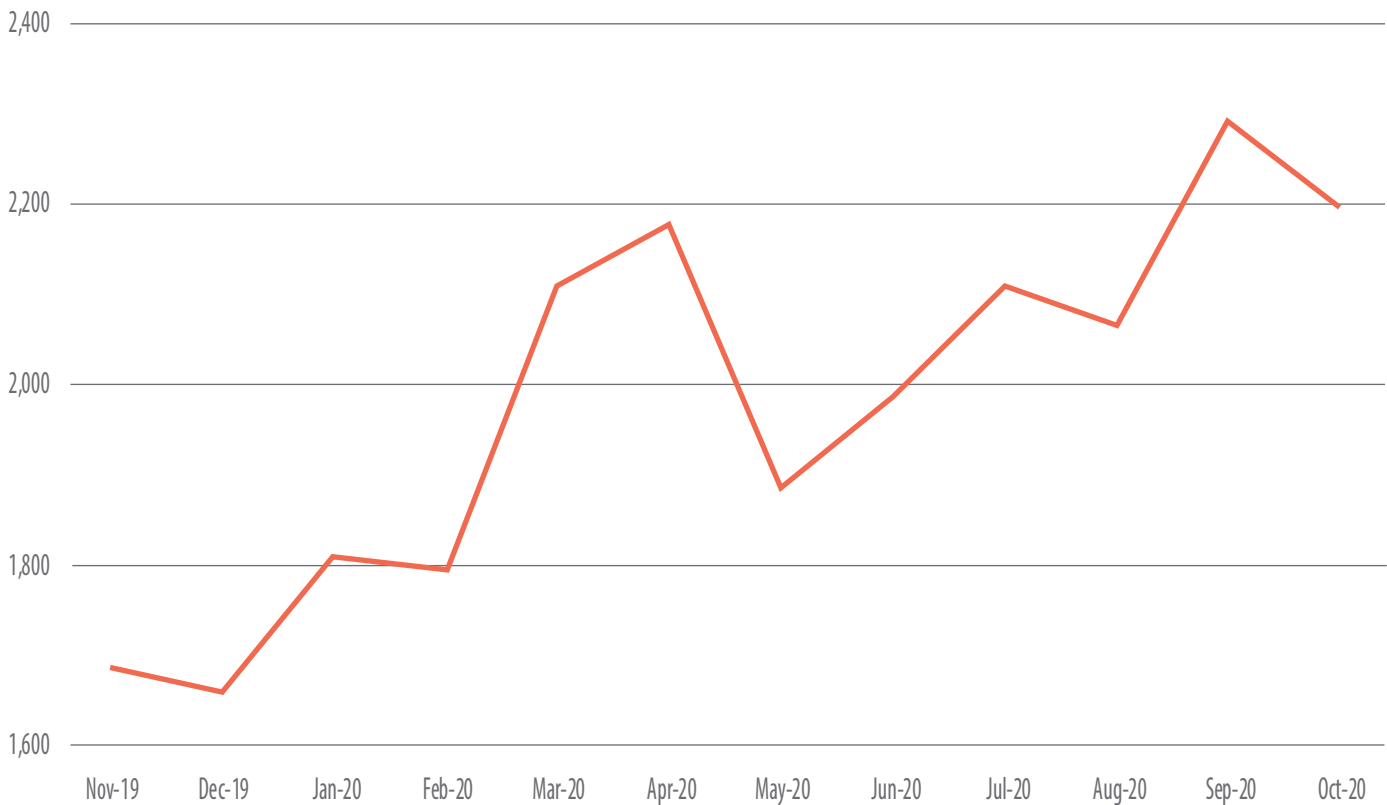
Mortgage borrowers are scared that if their requests are not resolved on time, they could fall behind on their payments, see their credit ratings plunge, or even lose their homes. In some cases, only their mortgage servicers stand between them and financial disaster.

Figure 1. Which of the following have you recently experienced with a financial institution?



Note: All the above figures are in percentages
 Source: J.D. Power Pulse Survey, 2020

Figure 2. Mortgage consumer complaints have shot up



Source: Consumer Financial Protection Bureau

Automation: Reduce costs, improve customer experience

Without automation, managing the surge in call volumes effectively is challenging in the absence of significantly scaling up operations. One solution that could help both borrowers and mortgage servicers is the already familiar chatbot. These human-like conversational platforms are common throughout the financial services industry but not used as widely among mortgage servicers.

Banks primarily use chatbots to answer simple requests, such as account balance, loan status, deposit verification, and credit card details. These bots cater to a specific set of questions with responses that could be obtained manually. Questions that

are not part of that defined repository are transferred to a contact center representative. With the simplest requests managed by technology, those representatives can focus on more complex requests.

Mortgages, however, have inherent difficulties that often require humans to understand and respond to the borrower's query before providing an acceptable solution. Every combination of mortgage and borrower creates a unique case, which has held back the adoption of chatbots in that industry. In addition, chatbots need to train with significant datasets to learn the vast mortgage-related terminology. That effort creates another set of challenges for mortgage chatbots.

Plain-vanilla FAQ-based chatbots cannot satisfy the needs of the mortgage customer. Organizations

need chatbots with the cognitive ability to run machine learning and natural language processing (NLP) algorithms on unstructured text. Once a barrier, technological advancements have made this type of chatbot possible.

Financial organization need cognitive chatbots backed by machine learning and natural language processing

Also, despite its complexity, the CARES Act created a rules-based framework that lends itself to technology such as the chatbot, since there are a limited number of factors it needs to navigate. These chatbot platforms, which are accessible anytime, can resolve queries within minutes and help borrowers better understand their new options.

This tool has the potential to ease the stress of many borrowers and reduce the burden on mortgage employees trying to field those calls. The pandemic has catapulted technologies that previously would have taken years to gain acceptance — the mortgage chatbot is just one such example.

The Infosys Center for Emerging Technology Solutions (iCETS) created a mortgage chatbot specifically designed to help consumers with CARES Act queries and reduce contact center costs. The iCETS mortgage chatbot can reduce back-office load by 20% to 30% and improve customer experience because bots can respond more quickly than a contact center representative. Moreover, one chatbot algorithm can support multiple customer conversations simultaneously, thus increasing operational efficiency.

The chatbot created by iCETS can help boost customer experience by reducing back-office load by 20%-30%

The iCETS chatbot has two variants — one general and one specific. The first can quickly respond to anonymous visitors who have general mortgage-related questions about the CARES Act. Those questions include:

- What if I miss my loan payment?
- Can my property be foreclosed during the forbearance period?
- Will I owe unpaid amounts in a lump sum once the payment pause is over?

The second is a conversational AI-assisted chatbot (voice and text) that solves account-specific questions for existing customers. The bot has access to loan accounts, which allows borrowers to learn more about how the CARES Act will affect their

mortgage and their available options. This technology lets consumers make CARES Act mortgage decisions, guided by chatbots, without human assistance. The bot is also integrated with backend systems and can process borrower requests based on their selected option.

The iCETS mortgage chatbot uses NLP to recognize the intent behind a borrower's question, while the bot's machine learning helps train it to improve the accuracy of its responses. The chatbot is also updated frequently with the new clauses added to the CARES Act and by continuously retraining it with responses. Accessible from a mobile phone or desktop computer, the omnichannel bot can also connect the borrower with a contact center representative if it isn't able to comprehend a borrower's question. Furthermore, the technology allows the bot to self-educate from the conversation so that it can evolve over time and answer the same question when it's repeated in a future scenario.

The intelligent bot's reading comprehension feature allows it to scan through the borrower's mortgage contract and answer contextual, contract-related questions without delay. The mortgage borrower and contact center representative can save time since they don't have to scan through large numbers of pages to find relevant information.

Managing consumer traffic created and altered by the pandemic is an obvious use for mortgage chatbots today. But even after the medical and financial crisis passes, NLP-backed chatbots will offer extensive benefits, from cost savings to better customer service. In the right scenarios and with the right conversations, chatbots can be much more effective than other channels. Regardless of their purpose, chatbots are expected to help banks save an estimated \$7.3 billion in operational costs by 2023, according

to Juniper Research. This represents 862 million hours of time saved for banks.³

The pandemic has created a digital divide in the financial sector. Mortgage providers that started their digital transformation pre-COVID-19 were better prepared to weather the shifting environment and financial stresses. Other companies are trying to catch up by arming themselves with a new digital architecture. For both, the right tools will provide new ways to better serve their customers now and eventually emerge stronger.

References

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Authors

Mudit Mongia

Client Solutions Manager - Infosys Center for Emerging Technology Solutions (iCETS)
mudit_mongia@infosys.com

Sharan P Bathija

Infosys Knowledge Institute
sharan_bp@infosys.com

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