



Business challenge

As the COVID-19 virus swept into Texas and citizen demand for pandemic-related information increased rapidly, the City of Austin needed to quickly boost its ability to provide residents with timely and trustworthy answers.

Transformation

When the COVID-19 pandemic struck, the City of Austin was deluged with citizen requests for information and assistance. By deploying the IBM® Watson® Assistant for Citizens chatbot, the city government was able to quickly deploy an interactive and intuitive communication tool that could deliver accurate and up to date information about the public health crisis.

Results

Deployed in one week

to meet the public's need for pandemic related information 24x7

Understands dozens of COVID-19 pandemic-related topics

to answer the most pressing questions asked about the outbreak

Constantly trained and refined through machine learning

to improve answer quality with each chat session

City of Austin

Antidote to anxiety— providing citizens with accurate COVID-19 information

The second largest state capital in the US, [Austin](#), Texas is also the 11th largest city in America, with almost one million residents. Ranked as one of the fastest growing major metropolitan areas in the country, the Austin region is often called “Silicon Hills,” reflecting the high concentration of technology firms based in the area. The City of Austin has an annual operating budget of over USD 4.2 billion and employs more than 14,000 people in over 40 departments.

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—Alicia Dean, City of Austin
Marketing Communications
Consultant

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A public health and information emergency

At the beginning of 2020, while following news reports about the COVID-19 virus landing on American shores, the people of Austin waited and wondered. When would the virus come to Central Texas and how it would impact their lives?

Answers to these questions came in rapid-fire succession. On March 6th, Austin's mayor cancelled the iconic South by Southwest festival out of concerns that large crowds could spread infection. A week later, the first COVID-19 case in Austin's Travis County was diagnosed. On March 24th, Austin officials issued a stay-at-home order and a bustling city began to shut down. And on March 28th, Austin registered its first COVID-19 related fatality.

In response to these events, public demand for pandemic-related information reached high levels of intensity. The City of Austin already managed a range of public information platforms including a well-used 3-1-1 phone service, a comprehensive website and various social media channels. "However, it became clear to us that, when it came to getting specific COVID-19 information, the public did not want to wait for a phone operator or wade through many web pages to find what they were looking for, says Alicia Dean, Communications and Marketing Consultant for the City of

Austin. "We needed to provide residents with a faster way to get answers for specific questions."

Another option soon emerged: could the city's website host a chat room with an automated agent that could immediately answer the most pressing questions about the pandemic? This proposal sounded plausible, but it would take Austin's IT staff months to develop, test and deploy a usable pandemic response chatbot from scratch.

Meanwhile, public demand for information kept growing as thousands of Austin residents became infected with the virus.

Shortly thereafter, the City of Austin received yet another citizen inquiry. But this time, the callers didn't have questions about the pandemic. They had answers.

Coming through at a critical moment

The callers were from an information technology company that has been a part of the Austin community since 1937—IBM. Austin officials learned that they did not have to go far for a pandemic response chatbot because IBM had already tested and developed a solution, based on Watson™ AI technology.

In late 2019, when reports began coming from China about a novel coronavirus outbreak, IBM engineers proactively built the Watson Assistant for Citizens chatbot platform.

Designed specifically for use by governments to communicate with constituents on pandemic-related topics, the chatbot is pre-loaded to understand and respond to common questions about COVID-19, based on the latest information from the US Centers for Disease Control and Prevention (CDC).

To make deployment as fast and efficient as possible, IBM offered the Watson Assistant for Citizens chatbot to the City of Austin free of charge for the first 90 days and provided technical assistance with initial setup on the city's website.

Through close collaboration across all city departments and IBM, the chatbot was installed, tested and deployed within one week. By the beginning of April 2020, visitors to the City of Austin's home page were pressing a button labelled "Coronavirus Questions? Chat with our Virtual Assistant" and getting the timely information they needed.

"We were able to stand up the Watson Assistant for Citizens chatbot platform very quickly," says Dean. "It was a 'just add water' solution for the City of Austin."

Smarter answers with every question

Now, in addition to calling the City's 3-1-1 information line, Austin residents can connect with the "City of Austin Bot" at any time of the day or night. The chatbot is updated with the latest information from local and state

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—Divya Rathanlal, Emerging Technology Program Manager, Communications and Technology Management, City of Austin

government agencies, so citizens can be confident in the answers they receive.

In addition to CDC-informed topics, the Austin Watson Assistant for Citizens chatbot is also conversant in many additional topics related to staying at home, social distancing, people at high risk, local screening resources, local news updates, business and school closures, and job loss and unemployment services.

During the initial rollout, the chatbot was set up to interact with citizens over a text-based chat. However, it can also listen to and speak with users through a phone interface, and the City of Austin plans to add voice functionality after further testing.

"The virtual assistant's natural language processing technology, which teaches machines to better understand human linguistics, will allow the quality of the service to improve over time," says Divya Rathanlal, Emerging Technology Program Manager for the City of Austin. "Our residents are counting

on us to provide very timely updates on COVID-19 and the evolving situation.”

“The chatbot is very nimble, robust platform that makes content curation easy,” says Dean. “With this communication tool augmenting our other channels, the City is able to shorten the distance between residents and the vital, pandemic-related information they’re asking for.”

The COVID-19 pandemic will take unpredictable twists and turns as it moves through communities across America and around the world. But one constant through this outbreak will be the commitment of government leaders to serve their citizens—and the commitment of IBM to provide civic leaders with AI-powered resources that can reassure humanity during a time of great uncertainty.

Solution component

- IBM® Watson® Assistant for Citizens

Take the next step

To learn more about the IBM solution featured in this story, please contact your IBM representative or IBM Business Partner.

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