

The Power of AI and Local Government: Staying One Step Ahead During an Emergency

How the City of Dayton managed multiple crises and adjusted its communication strategy with the help of AI.

Over the course of several months, the City of Dayton, OH, monitored citizen feedback and improved its crisis procedures during and after each challenging situation that occurred in the city.

The Challenge The City of Dayton, OH, experienced a number of difficult events from February to August of 2019. These included a water system outage, hate group rally, a F-4 tornado, and a mass shooting. These events triggered significant citizen discourse with specific instances garnering more negative sentiment than others. The municipality had to identify what were the key concerns based upon its citizens' feedback and what was the best approach to successfully address those topics.

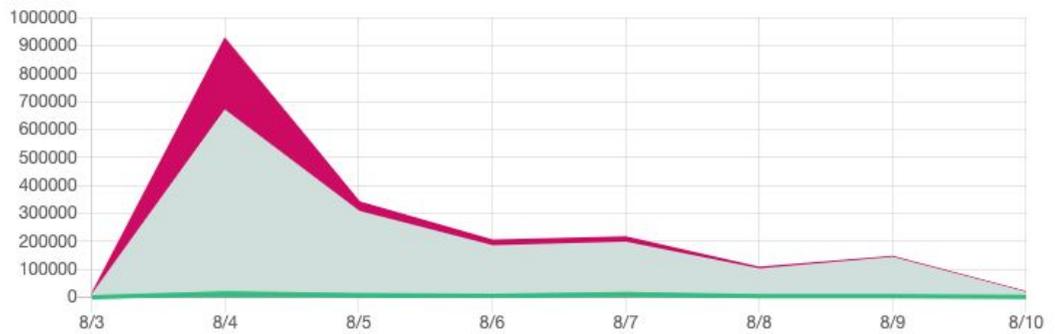
The Zencity Solution The City of Dayton used Zencity's platform to identify specific concerns of citizens during and after the crises that affected the City. The municipality used Zencity's AI to aggregate data from its call center, social media, the local media, and other relevant data sources. During each crisis, the platform showed that there was a significant increase in discussions centered around distinct subtopics related to the crises. For example, during the water system outage, the City's call center received thousands of calls that overwhelmed the service. It needed to efficiently sort through the large volume of information that was coming in. The City turned to Zencity's sentiment analysis to follow in real-time if its communication on the crises was satisfactory for its citizens. The platform showed, for example, that there was dissatisfaction with the lack of information on the status of the repairs. City management reversed that negative sentiment by increasing the frequency of their updates. This type of proactive assessment of discourse subtopics was then applied to all the other crises that occurred in the city. When a white supremacist group announced their intention to hold a rally in the city, the local government immediately denounced the event and monitored citizens' reactions with Zencity's platform. It became clear via Zencity's data that citizens wanted to act and respond, so the City quickly started a 'United Against Hate' initiative as an outlet where citizens could peacefully protest the event. The citizens were overall pleased with the way the City handled the event and how it did not result in a violent situation. By utilizing the Zencity's capabilities to pinpoint the unique reasons behind citizen dissatisfaction, the municipality was able to tackle each issue head-on quickly and efficiently.

Actionable, Data-based Insights

1. **Real-time analysis** of the data sources supplied the City of Dayton with an overview of the efficiency of its services so that the municipality could identify areas that needed a quick response. For example, when an F-4 tornado hit Dayton, the Zencity platform alerted the City of the concern for emergency sirens after citizens complained online that they could not hear them and that mobile notifications did not suffice. Given the community's sentiments and feedback, the City began to explore other notification platforms.
2. **Sentiment analysis** enabled city management to determine if it was taking the best course of action in response to a crisis or if there was a need for a different approach. For example,

during the mass shooting in August where ten people were killed, citizens had an overall positive response towards the way the City handled the crisis. In particular, surrounding the fact that DF officers were able to take the active shooter out in 32 seconds. The Dayton community considered first responders as “heroes” and were extremely grateful that they had responded so quickly to the shooting, thus preventing an even greater tragedy. This resident feedback helped validate the procedures of the first responders and the City in the face of such challenging circumstances.

SCORE OVER TIME



“ Our citizens are very active on social media. We used Zencity to find any gaps we had in our online media strategy and we took proactive measures to ensure that any information that they were receiving about a crisis was up-to-date and accurate. It was a lifesaver and really helped us speed up our response process.



Joseph Parlette
Deputy City Manager, Dayton, OH

Results



The City of Dayton improved its citizen-facing communication strategies and enhanced the efficiency of its crisis monitoring capabilities.



The City used AI to augment the performance of the services that it provided to its citizens during each crisis.



The municipality was able to validate the success of the City’s hard work based on data.