

2024 NASCIO STATE IT RECOGNITION AWARDS

- **Project Title:** How May I Help You? - Empowering Data-Driven Decisions to Optimize Customer Service Centers

State: Missouri

Agency/Division: Office of Administration, Information Technology Services Division

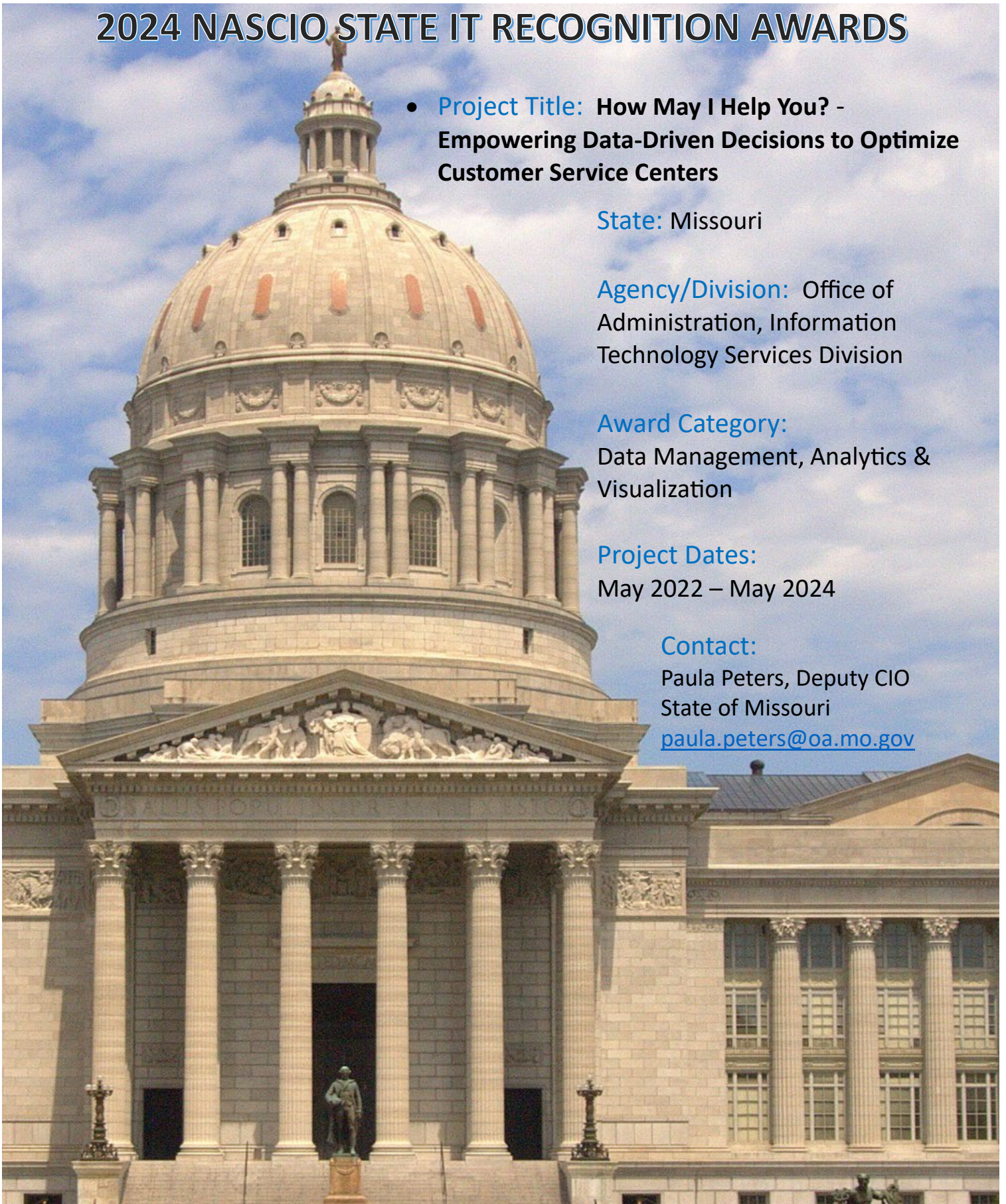
Award Category:
Data Management, Analytics & Visualization

Project Dates:
May 2022 – May 2024

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EXECUTIVE SUMMARY

Early in Governor Mike Parsons administration as the 57th Governor for the State of Missouri, an emphasis was put on “Missouri Better Government”. The Governor challenged state employees to “meet Missouri citizen’s expectations so that we are good as any organization.” There was an expectation that that Missouri state government become more transparent, more citizen friendly, more efficient, more focused, and more accountable. In response to this directive, the Information Technology Services Division and the Operational Excellence Division at the State of Missouri began work to make our customer service centers more efficient and responsive to the needs of our citizens.



We knew that to meet the needs of the citizens our customer service centers had to better handle the volume of calls coming in. The State has 28 different customer service centers handling over 4.5 million calls a year. Many, such as the Child Abuse and Neglect Hotline, provide for urgent needs across the state. It is important for us to answer calls to the customer service centers quickly and handle the citizens needs efficiently and in a timely manner. These customer service centers are often the main contact citizens have with the State.

The States food assistance program was struggling to handle the volume and service our citizens effectively. So much so, that a [federal lawsuit](#) was filed alleging that the “dysfunctional” call line and difficult process violated federal law. With difficulty retaining staff and over half a million calls each year to this unit alone, we needed to find better solutions to assist Missouri citizens.

The project started in May of 2022, and during the project, we identified 28 customer service centers to optimize. We began by forming our Customer Service Center Working Group to form a coalition of customer service center managers to drive solutions. The results of this project have led to a massive reduction in



abandoned calls. Statewide we have gone from a high of 70% of calls abandoned to currently 22% abandoned. Our continued diligence and added technologies will continue to reduce the number of abandoned calls. The following pages will outline our steps to success and plans to continue to better serve the citizens of Missouri.

IDEA

What problem or opportunity does the project address?

One of Governor Mike Parson's priorities put an emphasis on "Missouri Better Government" and the pandemic highlighted that many of our citizens still utilize the telephone to contact the State of Missouri for services. We needed to improve! Many of our call centers were struggling to meet the demands of the citizens for information and registration application processes.

The project had a set of target objectives –



1. Understand the key factors causing our long wait times and high abandon rates.
2. Create visualizations to understand current state and track progress.
3. Build a team of call center managers across the state to focus on call center improvements.
4. Produce a desired data lake pipeline architecture.
5. Produce a Call Center Business Intelligence Maturity Path.
6. Build a data visualization template for individual call centers.
7. Enhance existing statewide dashboards.

Why does it matter?

The State Customer Service Centers provide many critical needs for citizens of Missouri. Many critical services are handled by these groups, such as Child Abuse/Neglect, SNAP benefits, tax issues, driver licensing, provider trainings for medical professionals, and many more. Having quick access to these services is critical for millions of Missouri citizens. The inability to connect to our customer service centers can cause citizens to lose benefits, directly impacting the financial support they need.

What makes it different?

We found in Missouri that customer service centers were on their own data islands with limited ability to monitor their progress. They also had limited ability to share key performance indicators with other customer service centers. We used data and visualizations to tell the story of our customer service centers quickly and effectively. Combining all customer service centers into a data lake allowed us to see trends across the state. This allowed for enhanced analytics and the ability to share our key performance indicators with a broader audience.

What makes it universal?

The NASCIO 2024 State CIO Priorities lists Data Management/Data Analytics as one of its top priorities. This same priority is true in Missouri. State Government provides many invaluable services to their citizens. Customer Service Centers are a critical piece to helping our citizens. With over 4.5 million calls each year, insuring they run as efficiently as possible can have a huge impact on our how we deliver services to citizens. We believe that other states would benefit from what we have put together, and we are happy to share our findings.

6 DATA MANAGEMENT / DATA ANALYTICS

data governance; data architecture; strategy; business intelligence; predictive analytics; big data; roles and responsibilities

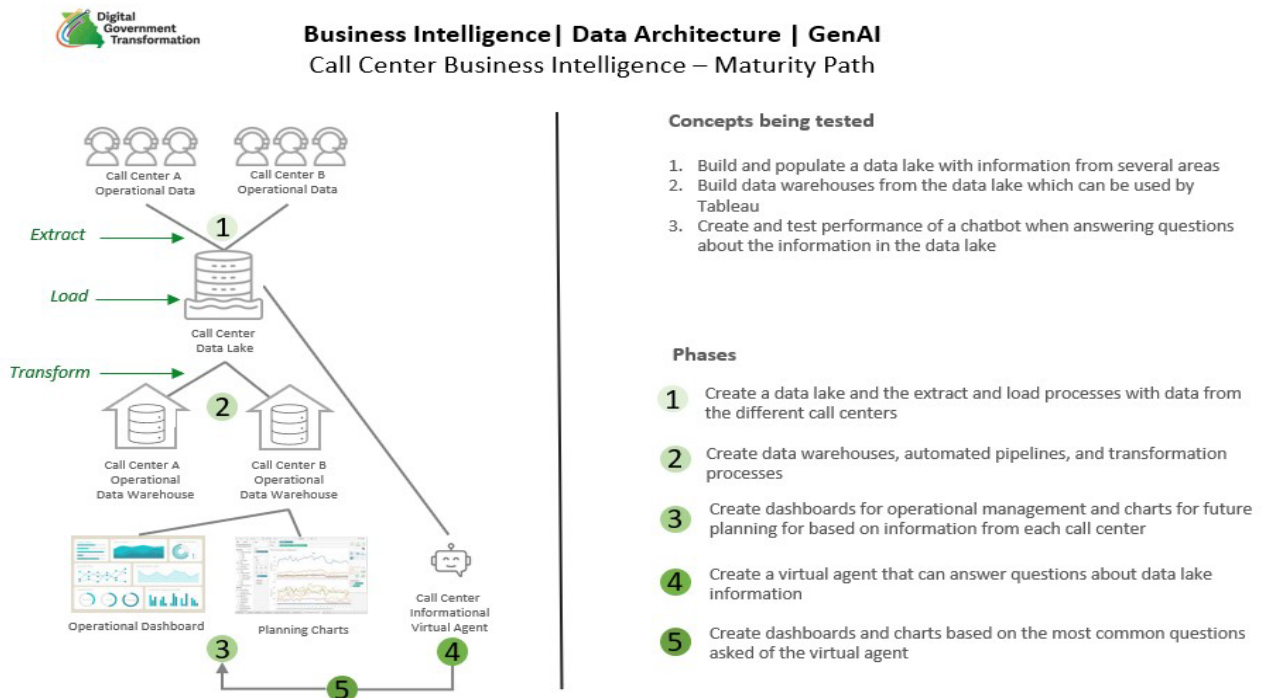


IMPLEMENTATION

What was the Roadmap?

Governor Mike Parson challenged us to improve our customer service centers. A major component of this initiative was to create a system of data collection, analytics, and visualizing the data to gain understanding of what is happening. We have combined that with training and education for our customer service center managers including, data literacy, understanding KPI's, staff retention efforts, and communication and collaboration across customer service centers.

With our Call Center Business Intelligence Maturity Path, we were able to outline an efficient and effective data pipeline for quality metrics from high level KPI's to detailed metrics for each customer service center.



Who was involved?

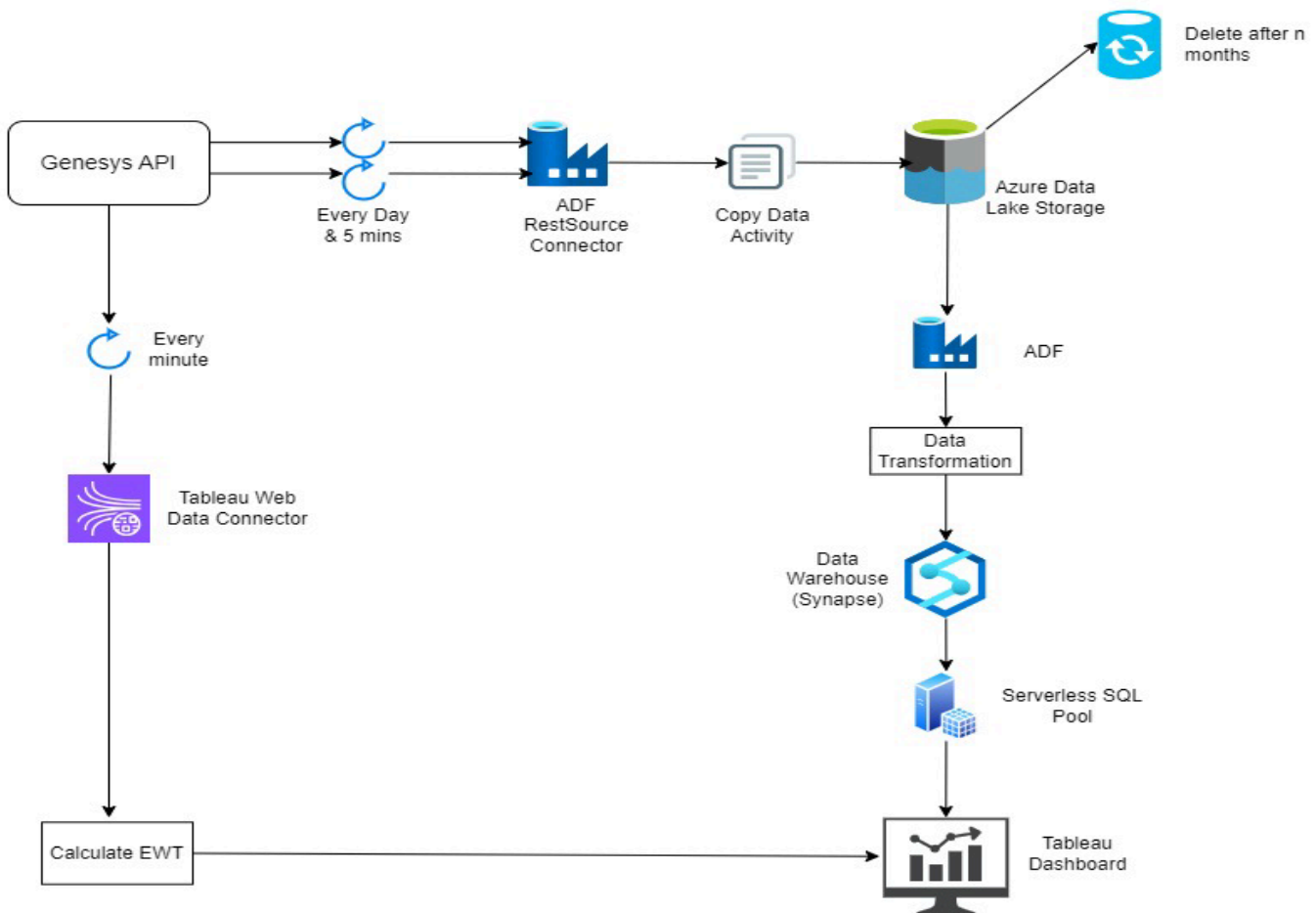
The concept was originally developed by the ITSD Data and Analytics team working in conjunction with our Operational Excellence division. Together with feedback from the Office of Administration Commissioners Office and all Customer Service Centers across the state, we gathered support and began discussion appropriate key performance indicators to track. The desire to streamline the data pipeline led us to engaging the Enterprise Architecture team and hire on a Data Architect. This has allowed us to explore the technologies needed to make this happen. We brought in staff from the Genesys call center application team to help us connect to the Genesys API's. Microsoft assisted in properly building out our initial data lake architecture.

How did you do it?

The project took team efforts from hundreds of people and a wide variety of teams. Operational Excellence leaders worked with customer service center managers across our 28 different centers to gather needs and coordinate who would be reporting data. Our Data and Analytics teams took this initial rudimentary data pipeline with Excel as the backend data. While inefficient, this allowed us to begin building our statewide metrics. Our Analytics team used Tableau Prep, Desktop, and Server to deliver interactive dashboards to provide insights into the status of our call centers.

With customer service centers able to share metrics with leadership they could begin to make changes in their processes to improve performance. Our teams then began to focus on building out the data lake to streamline and automate the data process as well as deliver more granular data.

Customer Service Center Data Pipeline



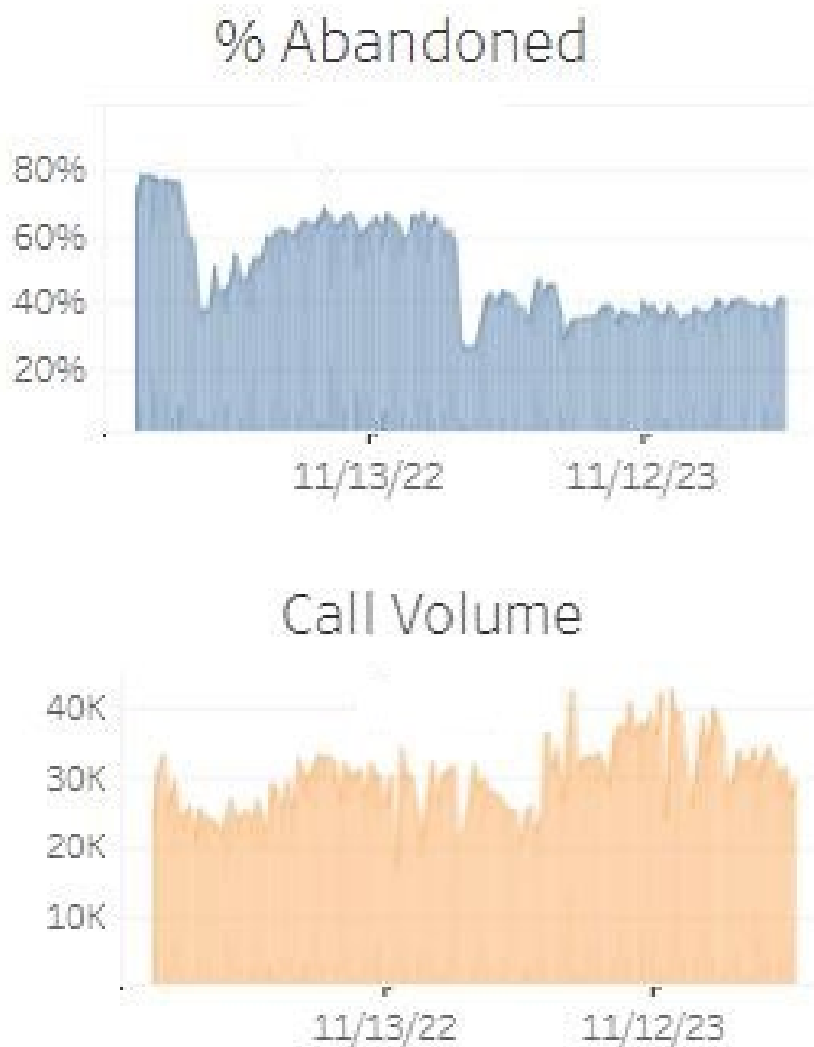
IMPACT

What did the project make better?

Imagine the frustration for our citizens as they potentially had to wait for several hours on hold to speak with someone about their needs for critical services. Our abandon rates were so large that hundreds of people were just giving up and hoping that trying another time would help. Now our abandon rates are half of what they were while calls into the centers continue to rise. This allows us to help more citizens get the services they need.

How do you know?

Improvements in our customer service center can be seen with our visualizations. Our largest customer service center has seen marked reductions in abandon rates with increasing call volumes.

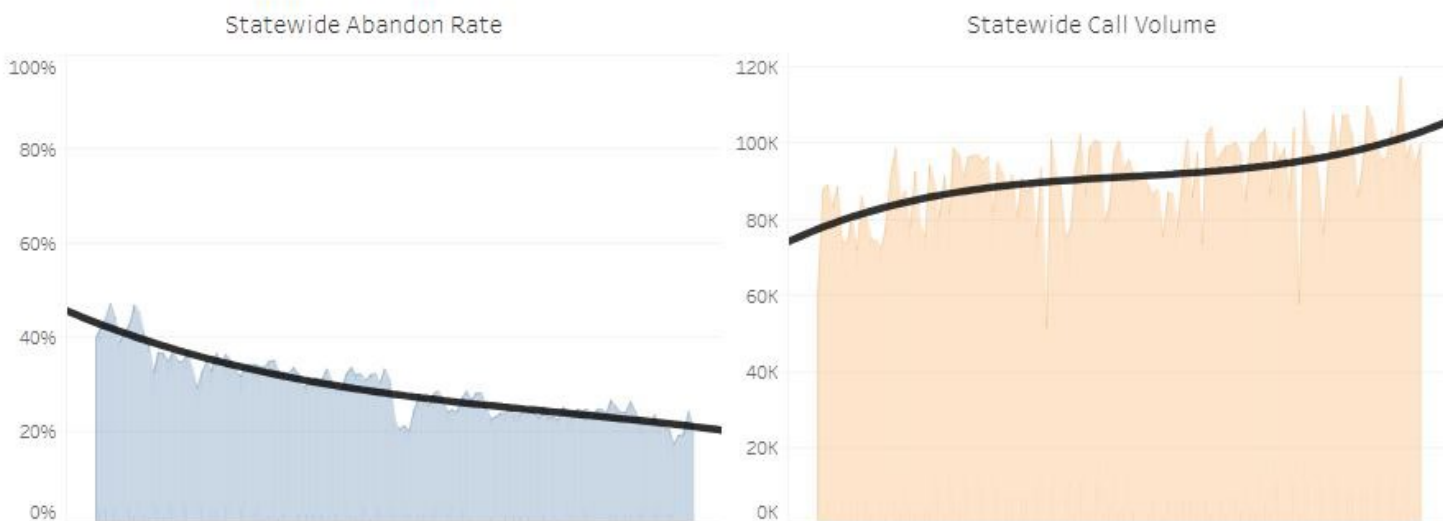


*Charts displaying weekly numbers

Statewide with all 28 customer service centers we are seeing similar trends.

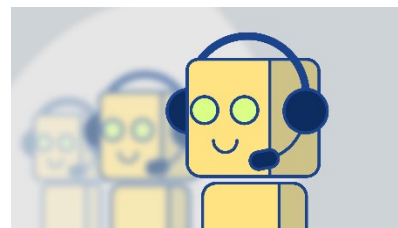
How are our numbers trending?

Date Range
Last 3 years



What now?

We continue to refine our numbers and we will carry out additional initiatives as we see the need for them. We have our lakehouse stood up and populated with all customer service center data. In the next few months, we will implement near real time visualizations that allow customer service center employees to see their progress and how many citizens they are currently helping. We will also be implementing various closed system AI assistants. The first being an assistant to delve more deeply into the customer service center data. We will expand that to AI assistants that will help citizens find answers to their questions in a fast and efficient way with little to no wait time. We also continue to consult experts like Gartner to help guide us along the way.



As our analysis of the data improves, we will be able to continue to find more opportunities to streamline services and help more citizens without increasing staffing. We continue to strive to deliver world class services to the citizens of Missouri. The effective use of Data, Analytics, and Visualization are a key driver in those successes.

Lakehouse is a promising concept with the potential to become a foundational analytical data store to unify and harmonize all types of organizational data and related processes. It will underpin modern design concepts such as data mesh and data fabric, as well as modern use cases such as AI/ML, GenAI and real-time analytics.

- Gartner