



Public Safety Company

CASE STUDY

How the Public Safety Company utilized DQLabs and Azure Databricks to deliver a consistent source of cleansed data to improve public safety and community planning.

The Public Safety Company, one of the top-ranked metropolitan areas in the United States, is on a mission to strengthen outreach, city-wide planning, and engagement services using data. The client provides a wide range of services to its residents, including public safety, utilities, transportation, and parks and recreation. To efficiently manage these services and make data-driven decisions, the city relies on a large amount of data from various sources. However, the data quality of these sources has been a challenge for the city, leading to inaccurate and inconsistent data that hinders decision-making.

Some of the primary data quality challenges faced by the Public Safety Company include data silos, data inconsistency, and data completeness. The city has numerous departments and systems that store and manage data, making it difficult to integrate data from different sources. This leads to data silos, which prevent the city from having a complete view of its data. Additionally, inconsistencies in data definitions and data entry practices have led to data quality issues, such as data duplication, missing data, and incorrect data. Finally, incomplete data sets make it difficult to draw meaningful insights and inform data-driven decisions. To overcome these challenges, the client needs to implement data quality management practices and a modern data quality platform that ensures data accuracy, completeness, and consistency.

INDUSTRY

Public, Government, and Non-Profit

TECHNOLOGIES



SOLUTIONS

- Data Discovery
- Data Quality



80% DECREASE IN
DUPLICATES TO CREATE A SINGLE
VERSION OF TRUTH IMPROVING
OUTREACH AND ENGAGEMENT

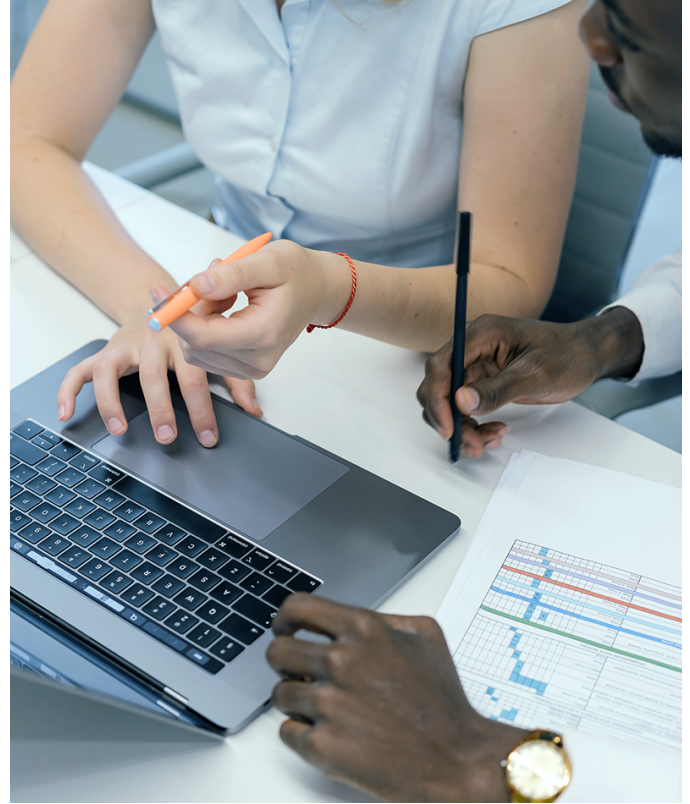


50% REDUCTION IN
COST ON TOTAL OWNERSHIP AND
MAINTENANCE THAN TRADITIONAL
DATA QUALITY TOOLS

Challenge

As the second-largest city in the state, the City of Spokane provides a wide range of services to its residents, including public safety, utilities, transportation, and parks and recreation. To efficiently manage these services and make data-driven decisions, the city relies on a large amount of data from various sources.

Public Safety Company set forth to provide a secure, privacy-compliant way of using data to aid activities around community-wide planning, public safety, addressing concerns related to high-risk populations, identifying service gaps, and providing support around case management services, emergency response programs, and health and housing initiatives. With data analytics and machine learning anchoring their strategy, they hoped to create an end-to-end, comprehensive, enterprise-scale, Modern Data Quality solution. However, the data quality of these sources has been a challenge for the city, leading to inaccurate and inconsistent data that hinders decision-making.



Some of the primary data quality challenges faced by the client include data silos, data inconsistency, and data completeness. The city has numerous departments and systems that store and manage data, making it difficult to integrate data from different sources. This leads to data silos, which prevent the city from having a complete view of its data. Additionally, inconsistencies in data definitions and data entry practices have led to data quality issues, such as data duplication, missing data, and incorrect data. Finally, incomplete data sets make it difficult to draw meaningful insights and inform data-driven decisions. To overcome these challenges, the Public Safety Company needs to implement data quality management practices and tools that ensure data accuracy, completeness, and consistency.

“By using DQLabs, we have eliminated 80% of noise to create a single version of citizen record for effective community-wide planning and provide better service to the residents.”

ERIC F.
Chief Innovation and Technology Officer

Solution

The Public Safety Company's data quality challenges were significant, but they were able to overcome them with the implementation of a modern data quality platform and the use of Azure Databricks. With DQLabs, the client was able to perform comprehensive data cataloging and discovery, making it easier to identify the source of data quality issues. By ingesting data from silos and bringing in one consolidated storage with a secure, 100% compliance data governance process, users were able to easily and reliably ingest massive volumes of data, in a matter of days.

Further, it provided a common, automated way of cataloging using defined and inferred metadata to understand what data was available to use. Today they no longer waste time looking for data or requesting access, and permissions. With DQLabs' automated data governance capabilities, they are able to scale and manage a wide variety of disparate data all in one platform.

One of the biggest benefits of implementing a modern data quality platform was the ability to automate the detection and remediation of data quality issues. With DQLabs, the city was able to set up automated data validation and cleaning procedures, reducing the risk of human error and saving time. Additionally, the use of Azure Databricks allowed them to streamline their data pipelines, making it easier to integrate data from multiple sources and reducing the time it took to get insights. As a result, the Public Safety Company was able to make better decisions and provide more accurate and reliable information to its citizens. With DQLabs, the city was able to collaborate more effectively on data projects, breaking down silos and making it easier for teams to work together. By building a culture of data governance and collaboration, the client was able to ensure the long-term success of its data quality initiatives.

Result

After implementing the solution using Azure Databricks and DQLabs modern data quality platform, the Public Safety Company was able to see significant improvements in its data quality and overall operations. Specifically, they were able to achieve a data accuracy rate of over 95%, a significant improvement from their previous rate. They were also able to identify and resolve nearly 90% of their data quality issues, allowing for more reliable insights and decision-making.

With the use of DQLabs and Databricks, the client was able to streamline its data processing and analysis, leading to faster data insights and improved data governance. By implementing the DQLabs modern data quality platform, they were able to have a centralized view of their data, which helped to reduce data silos and improve collaboration between departments. The platform's automated data quality checks and real-time alerts also helped to identify and resolve data quality issues quickly and efficiently.

Overall, the integrated solution provided by Azure Databricks and DQLab's modern data quality platform has helped the client to better manage its data, resulting in more accurate and reliable insights, improved decision-making, and a more efficient and effective government. The City has also been able to save time and money by reducing the resources needed to manually identify and fix data quality issues, allowing them to focus on more critical tasks. The success of this solution has encouraged the City to continue to prioritize data quality and modernize its data management processes. With the DQLabs integrated solution, now any reporting data could be overlaid for reporting, and analytics to create and aid in cross-wide city planning, outreach, and engagement population and even in addressing aids around high-risk population and emergency response services.

About

DQLabs is the Modern Data Quality platform that enables organizations to observe, measure, and discover the data that matters. With an automation-first approach and self-learning capabilities, the DQLabs platform harnesses the combined power of Data Observability, Data Quality, and Data Discovery to enable data producers, consumers, and leaders to turn data into action faster, easier, and more collaboratively.



See DQLabs in Action

Let one of our experts show the combined power of Data Observability, Data Quality, and Data Discovery to deliver data relevance.

✉ info@dqlabs.ai

🌐 dqlabs.ai

[Request a Demo](#)