... where Acumen drives Innovation

Data Revolution Unleashed

How a Metropolitan Wastewater Department Achieved 60% More Efficiency in Reporting

INTRODUCTION

In a major metropolitan area, the Municipal Wastewater Management Department partnered with Acuvate to revolutionize its reporting and data management systems. The project's goal was to transition from manual, labor-intensive report generation to an automated, real-time system, integrating data from various source systems into a unified Power BI platform for enhanced decision-making.

ABOUT CLIENT

The department is a key player in one of the world's largest urban sewage treatment operations, serving a vast population. This department is crucial in managing extensive wastewater infrastructure, using advanced technologies to ensure ecological balance and public health in a bustling urban environment.

THE CHALLENGE

The Municipal Wastewater Management Department was grappling with significant challenges in its data management and reporting processes. The primary hurdle was the labor-intensive and error-prone task of manually gathering data from multiple systems like CMMS and Orion. This manual approach not only consumed substantial staff time but also led to inaccuracies in the compiled data, resulting in reports that were often outdated and unreliable for timely decision-making. Additionally, the lack of an automated, unified system for real-time data analysis severely limited the department's ability to gain up-to-date insights into ongoing operations, impacting their strategic and operational decision-making.

Compounding these issues was the department's inability to proactively manage project timelines and delays, owing to the absence of automated alerts and an efficient system to flag potential issues in the contract processes. This situation often led to missed deadlines and inefficient resource utilization. Furthermore, the existing system's limited analytical capabilities restricted the department's ability to conduct thorough root cause analyses, thereby hampering process improvement efforts. These challenges underscored the urgent need for a comprehensive data analytics solution to streamline and optimize the department's operational processes.

Have A Question? Connect With Us Now

SOLUTION

PHASE 1

In response to these challenges, Acuvate proposed a comprehensive data analytics solution designed to revolutionize the Municipal Wastewater Management Department's approach to data management and reporting. The first phase of the solution involved the integration of data from eight disparate source systems, including CMMS, Orion, and CTMS. This step was crucial in consolidating various streams of data into a single, cohesive framework. By leveraging advanced technologies such as API calls, direct integrations, and Robotic Process Automation (RPA), Acuvate ensured that data extraction and consolidation were not only efficient but also accurate and reliable. This foundational work paved the way for the creation of an integrated data environment, capable of supporting sophisticated data analysis and reporting.

PHASE 2

The second phase of the solution focused on the development and deployment of 30 comprehensive Power BI reports and dashboards. These tools were meticulously designed to include key performance indicators (KPIs), visually engaging graphics, and intuitive filters, providing executives and department staff with near real-time insights into the contract process and its status. The design of these reports and dashboards was particularly noteworthy for their self-service capabilities, allowing users across various roles within the department to access and interpret relevant data independently. This empowerment was a significant shift from the previous system, fostering a more data-driven culture within the department.

PHASE 3

In the final phase, Acuvate introduced several advanced features to enhance the overall effectiveness of the solution. A robust dimensional model was created in Azure Synapse, offering a comprehensive framework for in-depth data analysis and facilitating sophisticated root cause analyses. Automated alerts and reminders were implemented to proactively manage delays and ensure adherence to Service Level Agreements (SLAs). Additionally, the solution included stringent data security measures, with role-based access to safeguard sensitive information. To ensure the successful adoption of the new system, Acuvate provided comprehensive training to business users, equipping them with the necessary skills to utilize the reports and dashboards effectively.

Book Your Consultation Now

ACCELERATORS

AI-Powered Efficiency
Employing AI accelerators to reduce data processing time by 40%, enabling quicker data integration.

Domain Expertise
Leveraging deep industry knowledge to tailor the data analytics solution to the department's specific needs.

Collaborative Project Approach
Ensuring alignment with the department's vision through regular communication and feedback.

RESULTS

30%
Increase in Productivity
Revolutionizing Wastewater Management with Automated Analytics

60%
Reduction in Manual Effort
How Advanced Data Integration Transformed an Urban Wastewater Department

15%
Cost Savings
Through Innovative Contract Management in Wastewater Operations

20%
Improvement in Resource Utilization
The Power of Self-Service Reporting in Wastewater Management

Real-Time Data Access Accelerates
Decision-Making in Urban Wastewater Management

About Acuvate

With over 17 years of experience in digital solutions, accelerating enterprise-wide digital transformation with our AI accelerators, we provide solutions and services that modernize, automate and support organizations. We help our customers transform their conventional processes to match the next-generation technological trend. We have a strong presence in the US, Europe, and the Middle East, where we serve multiple Fortune 500 companies. We specialize in New-age AI solutions, Migration & Modernization, and Digital Workplace Solutions. With our multi-skilled experts and packaged AI accelerators, we deliver unparalleled efficiencies and accelerate time-to-value for our customers