



AUTOMATION AND DATA ANALYTIC PROCESS TEAM SUCCESS STORY

DATA WAREHOUSE AND REPORTING TOOL FOR WASTE COLLECTION SERVICE COMPANY

The company's goal was to monitor the profitability and productivity of the various routes on a more timely and accurate basis. Leading to this engagement, the data being analyzed was deemed outdated and unreliable. This data came from four different systems, including (1) payroll system, (2) routes and collections, (3) scheduling and (4) general ledger accounting system.

To best facilitate reporting from these four systems, our team recommended a data warehouse fully integrated with a reporting tool and an interactive dashboard tool for enhanced reporting, monitoring, and data visualization. To execute, we started by considering the final outcome - what information did management want, how often did they want it and in what format? We then identified the sources of the data required to meet these analytic needs and designed a set of robust controls to ensure the data was extracted, transformed and loaded into the warehouse without impairing its integrity. In addition to the traditional reports produced using data from the data warehouse and the reporting tool, we designed and developed a series of interactive dashboards integrated with the data warehouse.



This solution allows management to monitor the productivity and profitability of all routes, as well as monitor each individual driver and department as a whole. With the custom calendar view, management is able to determine what days are the most productive and profitable in terms of fuel consumed, average time needed to complete a route, number of containers picked up and number of trips required to empty the load. In addition to the monitoring features, management also desired a "what if" analysis feature that helps better forecast and understand their cost structure. To facilitate this feature, we implemented a series of parameters which allows management to change key cost inputs, ultimately helping to identify the largest factors in profitability of each route. We also implemented driver goals, which were intended to make drivers more efficient.

About Schneider Downs Technology Advisors

Our consultants combine practical business experience with up-to-date technical options to implement cost-effective solutions for our clients. Our association with industry-leading technology companies provides our clients with the latest industry-specific, low-risk and proven solutions. Through vendor certification programs, advanced education and industry conferences, our consultants are trained and certified on the latest products and services. Our consultants bring a variety of experiences, technical knowledge and industry certifications to our clients, providing an ongoing and effective partnership.