

DC Water and Vertex Target Revenue Leakage with Advanced Analytics



Advanced analytics of meter-to-cash data, combined with review of key action points, process controls/breakdowns, and technologies, provides utilities visibility into where unbilled or uncollected revenue possibly resides, and strategies to protect future revenue.

The Opportunity:

Due to rising costs associated with capital projects, DC Water wanted to rule out any revenue leakage from theft, uncollected and possibly unbilled revenue. They enlisted Vertex to undertake a data-backed approach to identify sources of potential revenue leakage.



The Vertex Approach:

Vertex leveraged a proven methodology using advanced analytics to examine the meter-to-cash process for key drivers of potential lost revenue:

- Understand your business – interviews with key operations stakeholders provide context regarding key revenue management processes and concerns
- Detailed review of meter-to-cash process – review billing and adjustments, meter audit and inventory management, system reconciliation, account/premise status and lifecycle processes
- Identify critical data sources and prepare data for model – identify, collect and cleanse pertinent data to ensure optimal input for statistical analysis. Input data was extracted from billing system, AMR, AMS and relevant ad hoc databases
- Develop and deploy client-specific analytical model – customized to meet the specific needs of the project, including multiple analyses: customer segmentation, trend, peer-to-peer, and cross sectional/longitudinal

Insight derived from analysis was packaged into data-backed recommendations outlining where lost revenue may exist and potential ways to recover it. In addition, details were provided about lost revenue sources that might develop in the future, coupled with recommendations for protective measures DC Water can take.



Results Delivered

Vertex prioritized 23 recommendations (13 quick wins, 8 short term, 2 strategic medium-term) to address 35 potential gaps plus a prioritized road map for implementation:

- 0.45% of annual revenue identified as potential lost revenue
- 0.54% of annual revenue identified as “at-risk” revenue
- 5.24% of accounts identified for further investigation

As a result, DC Water:

- Established cross-functional team to carry out key recommendations
- Initiated project to identify and replace 140 large meters to ensure consistent consumption patterns
- Board approved an aggressive plan to replace 15,000 meters/ MTUs (Meter Transmission Units)



“Vertex has been a trusted business partner to DC Water since 2001. As a result, we often draw from their diversified list of services to meet some of our most challenging and ever-evolving business needs. The Lost Revenue Analysis project yielded great results and proved to be another successful venture.”

— Lauren Preston, Director
Customer Care, DC Water