

Optimizing Large-Scale Operations with Data Science

SUMMARY

A top electric utility needed to track the progress, timeline, and budget of each project associated with its large-scale infrastructure overhaul. The company engaged CapTech to provide a data exploration assessment that would help optimize program and project progression, forecast results, and address shareholder and regulatory questions.

CHALLENGE

The energy sector is a highly regulated industry. As such, shareholders and government officials regularly seek accurate, micro-level information regarding project progress and the utilization of recoverable funds. For companies operating in this space, it is critical to be able to provide this information quickly and accurately.

This became a significant factor for a large utility in the midst of a large-scale infrastructure overhaul with overlapping construction projects and timelines. As the 10+-year program progressed, the company sought to leverage data to answer important questions around its project lifecycles and costs, including construction progress, vendor efficiency, timeline impacts, and budget optimization.

The utility company engaged CapTech to conduct a data exploration assessment that would offer key insight into program progression, the cost of future work, and how processes could be optimized for maximum efficiency.



CLIENT

A Top Electric Utility Company



INDUSTRY

Energy + Utilities



SERVICES

Data + Analytics
Advanced Analytics

APPROACH

CapTech leveraged its data science and advanced analytics expertise to showcase the value of working with historical project data to predict future results with a two-week proof of concept engagement.

Through continuous collaboration with the utility company, CapTech approached the assessment with a 'fail fast' mentality, quick learning cycles, and fast prototyping to quickly identify actionable insights and opportunities for optimization.



RESULTS

At the conclusion of the two-week assessment, CapTech delivered the following tangible benefits:



Developed a predictive model that improved forecasted construction costs by more than 50% compared to current estimates



Identified 10+ use cases for optimizing project timelines to improve speed to construction



Created a data productization roadmap (near, medium, and long-term opportunities) for unlocking further value creation with existing and new data

Connect with us.

Call **844.373.4025** or visit us at [captechconsulting.com](https://www.captechconsulting.com) to start a conversation.