



OPTIMIZE ASSET INVESTMENT PLANS

With PowerPlan

Confidently evaluate investment
trade-offs for long-term impacts
on all stakeholders.

With clarity comes confidence.

Amplified Challenges for Utilities

Now, more than ever, the utility industry is facing complexity and change at an increased velocity. Still, utilities must provide safe and reliable service, maximum shareholder return and evidence-based support for revenue requirements.

Electric, gas and water utilities have to determine investment plans that balance cost, risk and return with each of these challenges:

- **Aging assets:** As assets reach the end of their service life, utilities must prioritize investments for maintenance and replacement.
- **Balancing investment needs with demand changes:** In some areas, growth strains existing infrastructure. Meanwhile, with electricity, energy efficiency has decreased demand growth. Electric utilities are uniquely in the business of incenting customers to use less of their product. Both situations require complicated calculations to optimize the balance between performance, cost, and risk.
- **Service expectations:** Customers and regulators expect safe, reliable energy and water, but also want utilities and regulators to keep rates as low as possible. Determining the optimal balance and communicating investment trade-offs is integral to financial and operational success.
- **Justifying rate increases:** Operational excellence requires proper investment, which must be accounted for within rates. Creating a fully supported case that justifies investment decisions is imperative for building transparency and credibility with regulators.
- **Natural disasters:** Utilities facing wildfires, hurricanes, ice storms, tornadoes and other devastating forces must pivot investments quickly to mitigate health and public safety risk. This may mean deferring planned projects in order to meet urgent demands. But quickly determining the impact of deferred investments is also critical.
- **Evolving regulations:** Complying with constantly changing policies and regulations from FERC, NERC, PUCs and numerous other state, national, and global agencies is crucial to avoid financial loss and other unfavorable consequences.

“By 2022, 50% of utilities will shift from traditional planning tools to AIP software to help them optimize the investments of their mission-critical assets.”

– Gartner ¹

¹Gartner, Inc., *Optimize Utility Capital Expenditures With Asset Investment Planning Solutions*, Nicole Foust, 22 January 2019. Subscribers may access the report here: <https://www.gartner.com/en/documents/3898772/optimize-utility-capital-expenditures-with-asset-investm>

Utilities need more effective methods to evaluate investment tradeoffs.

Complicated, disparate spreadsheets limit executives' and regulators' ability to understand the full impact of prioritizing certain projects over others or quantify risk.

Instead, utilities need a simpler way to:

- Enable clear decision making by prioritizing capital projects based on their business value
- Create transparency for all departments by ranking capital investments against consistent criteria, with the ability to see projects by line of business and jurisdiction
- Support a comprehensive, objective tradeoff analysis of all projects, taking into account impacts on timing and risk
- Generate asset investment plans that improve long-term financial planning and operational excellence
- Communicate investment scenarios with internal and external stakeholders (including the development of rate cases for regulators)
- Establish a culture of strategic capital planning among key leaders

Creating a Transparent, Strategic Asset Investment Plan

Utilities are responsible for making key short- and long-term decisions that best serve their customers and investors. Asset investment plans must be dynamic in order to account for constantly changing variables:

- Regulatory objectives
- Resource availability
- Shifting priorities or emergency work
- Project alternatives

The utility sector needs a way to integrate this information across departments so they can determine how to optimize resources and strategically plan maintenance and investments. This alignment cuts a path for utilities to:

- Provide safe and reliable service
- Balance investment needs for today and tomorrow
- Deliver the optimal level of service at the lowest customer rate
- Optimize spending to achieve these objectives

²ACSE American Society of Civil Engineers. (2017) 2017 Infrastructure Report Card. Retrieved from <https://www.infrastructurereportcard.org/wp-content/uploads/2017/01/Drinking-Water-Final.pdf>

According to the American Water Works Association, an estimated \$1 trillion investment is necessary to maintain and expand service to meet demands over the next 25 years.²



Turning Reactive Decision-Making into Evidence-Based Capital Planning

PowerPlan's Asset Investment Planning solution enables efficient and transparent investment strategies for utilities. It empowers teams to:

- Prioritize projects to maximize consumer reliability and shareholder value
- Proactively limit risk across asset portfolios
- Create defensible, fact-based investment plans and reports
- Visualize proposed projects and make objective investment decisions with conflicting constraints.
- Forecast capital asset needs and justify funding requests

Water Utility Case Study Summary: Washington Suburban Sanitary Commission (WSSC)

WSSC serves 1.8 million customers and is the 8th largest water and wastewater utility in the United States.

Challenges –

- Aging and failing infrastructure: 4000 break and leak incidents across a 2-year period
- Multi-year projections were onerous and time-consuming
- Data was constantly changing and plans weren't automated to respond
- Aging workforce

Solution –

- Consolidated data for \$15B worth of assets into single system
- Integrated with source systems for live updates, including Oracle WAM and ESRI GIS
- Created need-driven investment plans using real-time data
- Validated and improved historical model

Benefits –

- Capital plan is automated and dynamic
- Quickly generate reliable and actionable projections of asset life cycles to optimize future planning
- Unified platform to model and identify optimal asset investments
- Institutional knowledge captured in a scalable system

“PowerPlan supports the development of an optimized multi-year capital plan, which is an invaluable tool for those that know they can't do everything at once and are always working within budget constraints. Transparency and objectivity are crucial.”

– Director at I AM San Diego³

³The Institute of Asset Management
San Diego Chapter Meeting. San Diego. 13 Jun 2018.

PowerPlan Provides Clarity and Confidence for Utilities

Establish a single source of the truth so stakeholders can make the right infrastructure investments at the right time.

For CFOs

- Balance financial and operational objectives across the enterprise and lines of business
- Compare scenarios and trade-offs side by side to determine optimal investments over both the short and long term
- Ensure that the organization is maximizing return on investment in light of risk
- Provide transparency on how investment decisions are made

For Business-Unit Leaders

- Make a strong case for proposed investments to the CFO and external stakeholders
- See relevant reports for executive decision making and presentations
- View all assets holistically with a lens for risk or service levels
- Align strategic goals and objectives with investments, considering cost across domain and assets

For Capital Planners and FP&A Professionals

- Confidently interpret investments, considering trade-offs and impact analysis
- Prioritize projects objectively based on comprehensive return, using ‘what-if’ scenarios that analyze risk, service levels, or other objectives against multiple constraints
- Apply a consistent framework for investment modeling and analysis across different departments and lines of business
- Clearly report and communicate investment recommendations to executives
- Objectively assess the impact of timing on regulatory outcomes, i.e. mitigate regulatory lag

For Regulatory and Public Affairs

- Proactively communicate how investments align with overall priorities to customers and stakeholders
- Show regulators how investment plans directly impact consumer health, safety and reliability objectives
- Develop a long-term regulatory strategy, including customer rate impacts and optimal timing

Utilities We Serve:



GAS



ELECTRIC



WATER AND
WASTEWATER

“PowerPlan helps us strategically allocate capital for maximum ROI. Their scenario analysis helps us prioritize investments inside our constraints so we can confidently say we are making the best investment decisions at the right time.”

– VP of Capital Planning, Natural Gas



Why Trust PowerPlan?

- 25+ years' experience solving financial challenges for regulated entities across the globe
- 98% customer retention rate
- Proven integration with financial and operational systems, including ERP, EAM & GIS
- Complete end-to-end management from asset lifecycle planning to regulatory cost recovery
- Continuous product innovation to help utilities maximize resources
- Extensive partner network to bring customers more options for combined value



“They (PowerPlan) have a level of detail that is very strong. It’s a level of detail that is, I would say, exceptional.”

**– Tim Barrett,
S&P Global Ratings Analyst**

The Bond Buyer. (2018) D.C.'s Innovative Approach to Capital Planning. Retrieved from <https://www.bondbuyer.com/news/dcs-innovative-approach-to-capital-planning>



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