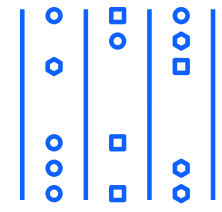


Outage prediction

Utility companies need weather-related data to know when—and when not to—mobilize





Collect

Collect data and confirm understanding

Gathering utilities data and key performance metrics is key part of this activity:

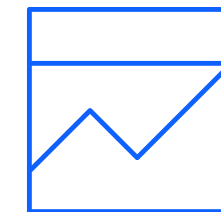
1. Obtain three years of outage data history, including weather parameters, seasonal factors, start and end time, outages and location.
2. Access IBM® Environmental Intelligence Suite forecast data for the utility service territories to match the same time period.
3. Gather insights from utility subject matter experts to understand mobilization strategy and associated costs.



Analyze

Tune and test the model with new data

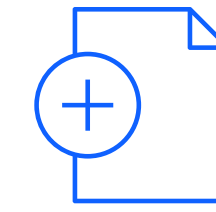
- Account for all types and sizes of weather and potential impact using a multimodel approach.
- Train the model to the utility service territory.
- Work with the utility to match the outage counts to mobilization strategy.
- Use multiple verification techniques that are designed to simulate real-time predictive skill.



Report

Results summarized

- Model skill based on combined 0–72-hour results.
- Model predictions compared to actual utility impact and mobilization level.
- Estimate cost savings based on model predictions and past utility storm response expenses.



Implement

Collect data and confirm understanding

- 83%**
0–24 hours ahead of skill
- 80%**
24–48 hours ahead of skill
- 80%**
48–72 hours ahead of skill
- <1%**
False alarm rate

Proven results

While working with a US-based, investor-owned utility company, the outage prediction model identified over 20 mobilizations that didn't need to happen during a 12-month period. By using the outage prediction model in real time, utility companies can realize several millions of dollars in savings annually by optimizing costly mobilizations.

Learn how the outage prediction model gives a real-world operations teams a head start on extreme weather.

[Read now](#)

