When severe weather causes an outage, utilities companies must act fast to get services back up and running. But a lack of advanced warning about when and where weather-related outages might occur can hinder your ability to restore power rapidly, keep customers happy, and control costs with efficient mobilization of repair crews.

Weather Company Outage Prediction is an automated and customizable cloud-based solution that combines accurate weather data and forecasting expertise with client-provided information and machine learning to help you predict and prepare for upcoming severe weather. These insights can drive potential benefits such as greater customer and stakeholder satisfaction, improved resource allocation, enhanced mobilization and restoration efforts, minimized risk and damage, and greater communication with stakeholders.

**Advanced analytical models and cutting-edge weather information**

Outage Prediction uses a machine-learning classifier that intelligently qualifies and quantifies the predicted weather and chooses the appropriate statistical model for predicting the likelihood of an outage. This outage modeling tool provides a level of sophistication that is among the top in the industry.

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**Data**

- TWC’s FOD (Forecast on Demand)
- Outages

**Modeling**

- Classifier
- Outage model (All-time worst)
- Outage model (Routine storms)

**Results**

- Customized prediction relevant to utility mobilization strategy

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*Through the use of a classifier, the outage model can intelligently qualify and quantify the predicted weather to optimize the prediction of outages by choosing the appropriate statistical model. This outage modeling tool provides a level of sophistication that is among the top in the industry.*

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*A cognitive solution to improve business processes* - Powered by advanced analytical models and cutting-edge weather information

ibm.com/weather
Light in the dark
An interactive dashboard consolidates critical information to help you continuously monitor your territory and detect conditions that may threaten infrastructure and service. Insights are provided as much as 72 hours in advance so you can recognize the areas most threatened by weather, discover the potential causes for outages, and anticipate any severe impacts.

Resource optimization support
Outage Prediction helps improve resource planning and allocation by mapping outage prediction to your utility mobilization levels. Outage count ranges for each mobilization level are displayed by area type to streamline the process of determining where and when to pre-stage crews and equipment, helping you restore power more rapidly while managing costs.

Past predictions
New predictions are generated each hour. You can also explore predictions from the last 72 hours, compare the current prediction to the past six hours, and track how the 24-hour prediction has changed over the past two days.

The Storm Search feature compares historical storms – filtered by date, number of outages caused, or number of customers impacted – with current forecast conditions to help you anticipate the likely consequences of a storm. You can also search for historical storm events that are similar to the latest forecast.

Planning for unknown variables
What if winds reach 30 mph? Or if precipitation increases? With the “Scenarios” tool, you can run multiple “what-if” scenarios by changing weather variables to project the likely changes in impacts on your service territory so you can make proactive decisions about possible outcomes.

To learn how Outage Prediction can help you improve restoration times, boost customer satisfaction, and reduce costs, visit www.ibm.com/us-en/marketplace/outage-prediction.