Every year, as the holiday shopping season gets into full swing, retailers at both online and brick-and-mortar shops begin worrying. They use seasonal sales projections from the National Retail Federation (NRF) and similar sources to guide product selection and inventory decisions. Then they cross their fingers and start second-guessing those decisions as they wait to see how closely the predictions match consumer behavior.

That's why AccuWeather, the global leader in weather forecasting and weather-related big data and analytics, issued its own holiday sales forecast. AccuWeather's 2017 holiday shopping sales forecast exceeded NRF estimates by as much as $4 billion, with nearly $2 billion of that increase directly attributable to the integration of AccuWeather forecasts of weather conditions into the analysis.

To get this estimate, AccuWeather's D³: Data Driven Decisions analytics group carefully developed and refined a big-data model to predict holiday spending. AccuWeather’s analysis predicted holiday spending during November and December, both e-commerce and in-store, would total $683.3 billion — an increase of 4.2 percent or $27.5 billion over spending for the same period in 2016. The NRF holiday sales forecast predicted a rise of between $23.6 and $26.2.

AccuWeather’s dedication to Superior Accuracy™ accounted for the difference. Where most holiday sales estimates consider only economic trends, AccuWeather’s analysts factored in the additional impact of weather conditions and weather forecasts on holiday shopping, which accounts for 25 percent of the change in sales, year over year. By including weather as a factor in its proprietary models, AccuWeather predicted a $1.3 to $4 billion increase for 2017 over NRF estimates of holiday sales.

When the holiday shopping season concluded, Mastercard SpendingPulse, which tracks both online and in-store spending, found that sales rose 4.9% in the period from November 1st through Christmas Eve. AccuWeather D³’s model, which predicted a 4.2% increase in spending, gave retailers and industry-watchers the most accurate projection by far of the season’s final sales numbers.

That Superior Accuracy™ is why customers turn to AccuWeather’s D³ analytics team to help them drive optimization and efficiencies by uncovering previously hidden relationships between weather events and business results. Decision-makers can use AccuWeather’s unique insights to better manage and take strategic advantage of how weather conditions around the world impact their business.

AccuWeather D³ empowers business decision-makers to unlock the patterns of the past to predict the future.

“Contacting customers ahead of major weather events builds brand loyalty for us and prompts them to buy from us right when they need products based on the changing weather. AccuWeather D³ helps us increase sales with relevant and timely messages.”

– Email Marketing Coordinator, $6B Retailer