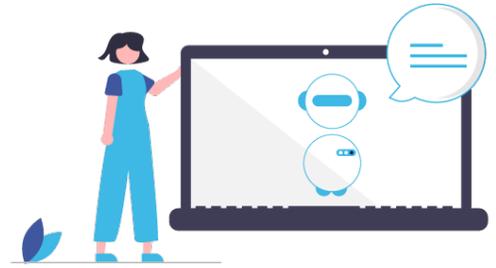


AI Driving Profit Today: Supply Chains Thrive



Consumer Goods business leaders have evolved beyond the hype of Big Data and have acknowledged that the true value of data lies in making insights actionable. That value increases exponentially as companies move through the analytics maturity curve, progressing from Descriptive to Predictive to Prescriptive Analytics, ultimately incorporating Artificial Intelligence (AI). While Descriptive, Predictive, and Prescriptive Analytics are already well-defined (see here and here), AI is still viewed as futuristic and very aspirational by many.

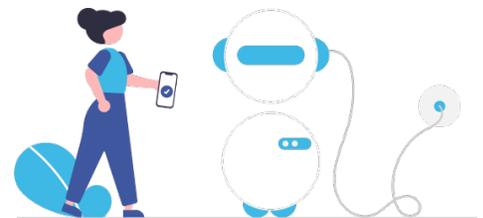


But there are Fortune 500 companies out there today who are reaping the benefits of AI by pushing the envelope on prescriptive analytics.

If descriptive analytics tells us what already happened and predictive analytics tells us what will happen, prescriptive analytics provides the decision-maker with options for what we should do based on sophisticated models. AI takes this a step further by allowing the business to control the situation and take action and change the predicted outcome

Let's take an example using the replenishment of summer items like pool chemicals, bug repellent and beach towels. These are products that are highly seasonal, highly promoted, have a limited sales window, and retailers don't want excess inventory at the end of the season. Descriptive analytics would simply tell us what sold last year and how much inventory was left over. Predictive solutions will help us figure out where out-of-stocks will occur and what future sales will be. Prescriptive analytics will then give us options for avoiding out of stock situations and eliminating surplus inventory. But by incorporating AI with prescriptive modeling tools, we can insert a level of control over the retailer's supply chain by incorporating additional learnings like actual logistics data, current temperatures, local activities, and social media sentiment.

AI takes these inputs, combines them with product performance data from similar situations, adds in insights regarding promotions and new product introductions, and helps executives make decisions by analyzing all the repercussions of each action down the line. Shipments are delivered on-time-in-full despite logistics complications, so products are on the shelf as the demand hits. Sell-through is accurately calculated despite unseasonable temperature fluctuations because weather data was incorporated into the model. This year, that means pool chemicals are still needed in late September in the Northeast! Thus, AI lets businesses control their own destiny by reacting to events that haven't occurred yet and it's that control piece that differentiates leaders from laggards.



Retail analytics vendor TR3 is providing exactly this kind of solution for Fortune 500 consumer packaged goods companies who are leveraging AI to boost profits. Millions of decisions and data points including inventory, sales, forecasts, demographics, weather, geography, supplier network, promotions, etc. are being quickly analyzed and the TR3 replenishment engine uses AI to evaluate the ripple effect of every decision so that suppliers can maximize store sales using limited inventory. Before AI, customers were driving in the rear view mirror, repeating prior plans and ultimately prior mistakes. Today, TR3's customers are taking advantage of what was previously an overwhelming amount of data and have become preferred suppliers to the world's largest retailers.

The results are impressive:

- 8% sales increase because inventory is on the right shelf at the right time
- 6% reduction in transportation costs from avoided rushed shipments and LTL orders
- 11% reduction in waste at the end of the season from outdated inventory or mark-downs to move product

Bottom line? Don't wait to enjoy the benefits of AI. Analytics leaders in the CG industry are leveraging existing technology like TR3 to control supply chains and optimize replenishment.