



Analytics Without Action is Hallucination

Examining the Value of Prescriptive Analytics
in Retail & CPG



Zebra
Prescriptive AnalyticsTM

Powered by Zebra Savanna™

The value of data is well understood across the retail and CPG industries. Hoping to leverage the numbers and statistics to improve sales, profits, and margin, virtually all companies have adopted some type of analytical solution. However, the output of these solutions is most often reports, sometimes for no other purpose than to visualize the data. More often than not, the recipient of these reports is an employee at the edge that needs to decide how to act on the data. This employee could be a truck driver, store-level employee, a Sales & Operations Planning (S&OP) associate, a Collaborative Planning, Forecasting and Replenishment (CPFR) analyst, or even part-timer with little to no data-analysis experience.

Report-based analytics systems are inefficient, mainly due to one major flaw. Traditional analytics answers the question of what happened and sometimes, with the right people, the question of why it happened. This is certainly a step in the right direction—but it leaves out the most critical questions of what to do and how to do it. It's certainly intriguing to read a report that says a store is in the red, or a product is not selling as expected, but that's not enough information to do anything about it. Why is the store or product suddenly unprofitable? Most importantly, how should one respond to this finding? How can one find the root cause of the issue and resolve it at the source? Was it a supply chain issue? A price issue? A placement or on-shelf availability issue? A planning / execution issue?

These questions can be answered by data, but only with the added component of actionability. Data is meaningless unless one knows how to leverage its insights to improve profits and strengthen margins. The best analytics solutions will issue actionable insights based on their interpretation of given data. Employees can then carry out the actions the solution delivers to generate value and make genuine, metric-driven improvements.

Consider the aforementioned example, with a store that suddenly doesn't show a profit. The fact that the store is unprofitable isn't enough information for an employee to take action and fix the problem—rather, it prompts further investigation via report analysis. While this investigation happens, the problem that caused the profit loss in the first place continues on, with no actions to resolve it.

Now consider the same scenario, but this time with actionable insights. The company's prescriptive analytics solution—an example of a solution that dispenses actionable insights—detects that a store is unprofitable, and correlates this with unusually high levels of waste in the store's dairy department. The solution dispenses this information to an associate, and, to make the insight actionable, directs her to verify the dairy workers are rotating product based on compliance.



Non-compliance turns out to be the problem. The dairy workers have not been marking down near-expired dairy products as policy dictates. With no markdown incentive for customers to buy the near-expired products, they simply expire on the shelf and the workers throw them out, costing thousands of dollars per week. Having traced the root cause, the store manager orders retraining for the dairy workers. Within weeks, compliance improves, waste decreases, and the store becomes profitable again. The solution then “learns from” the corrective action and outcome of the opportunity to improve future results. This collaboration between humans and machines is an example of “augmented intelligence,” combining artificial intelligence and human intelligence to make better decisions that increase sales and profits.

Now consider the scenario from a product / CPG perspective. A CPG organization’s prescriptive analytics solution alerts the company that multiple accounts are having packaging issues with one of its brands, a canned soup. Specifically, the complainants are reporting that the product’s labels keep falling off. The prescriptive action to the CPG company is to contact the packaging department for an explanation.

Packaging investigates, and finds an issue with the machine that sprays glue onto the can labels. There is a partial blockage in the glue gun, meaning that the machine is only spraying half the amount of glue needed to firmly secure each label. Because the prescriptive analytics solution alerted the involved parties in near-real time, and also led them directly to the root cause, the problem was fixed before it could significantly impact sales or the customer experience.



Here are some other case studies, each one with a problem that was resolved with the actionable insights of prescriptive analytics:

Communications Gap

At a national grocery chain, several stores sold out of a popular brand of ibuprofen tablets. The regional distribution center (DC) was also out of stock, so it couldn't deliver more. Only the chain's corporate buyers could place new orders of product for the DC, but due to a communication gap, neither the stores nor the DC notified them and the out of stock continued.

The retailer's prescriptive analytics solution detected a spike in negative online postings about the out-of-stock ibuprofen, and alerted the buyers to purchase more. The buyers allocated new cases to the stores in an expedited fashion, resolving the out of stock and creating a 4.7 percent sales lift. The communication gap was also fixed, thanks to the solution's root-cause analysis.

Payment Flaw

A beauty supply store's prescriptive analytics solution found several stores showing unusually high salon expenses. Specifically, these salons were going through more haircare products than expected for services delivered (e.g. a beautician using up one large bottle of conditioner per week, despite reporting just two conditionings for the period). The solution alerted the chain's Asset Protection team of this finding and directed them to investigate the salon practices at each location. To facilitate the investigation, the prescriptive action included a list of specific occurrences and the people involved.

The actionable insight led Asset Protection to discover a loophole in the payment process. After providing a hairdressing service, beauticians had to fill out a payslip indicating the service rendered. The customer then took the slip to the front register to pay. However, this process allowed the beauticians to provide "sweethearting" discounts by writing a less-expensive service on the payslip (e.g. giving a friend a \$300 smoothing treatment but charging them for a cheaper haircut instead).

The retailer took disciplinary action against the offending cashiers and amended its payment system, closing the gap. Within two weeks, the affected stores' cluster showed a cumulative sales increase of \$1,250 per week.

Quality Issue

An international fashion retailer was experiencing high rates of return for a popular summer dress. Using both sales metrics and "unstructured" data, like social media comments and online reviews, prescriptive analytics detected the occurrence and found that the reason for most of the returns was "wrong size"—specifically, the product was larger than expected.

Along with this discovery, the solution sent the retailer's e-commerce team a prescriptive action, directing them to change the style's online product description. The new description informed customers the size ran large, and they should purchase one size smaller than usual. This saved the style, and by the end of the season, the dress's return rate was just 0.76%, which is significantly lower than standard rates.



Internal Fraud

A fashion retailer had high rates of missing e-commerce shipments. The retailer's policy for responding to these complaints (shipping out a replacement product plus a \$20 gift card) was very expensive, yet these costs were simply written off as "a cost of doing business."

The retailer's prescriptive analytics solution analyzed recent appeasement shipments and found that many of them were going to the same five addresses. The module alerted the retailer's Asset Protection team, giving them the information and directing them to investigate.

Several employees at the retailer's call center had formed an organized retail crime group. Working together they'd legitimately buy a product online and, after receiving it, would call the center to complain they never got the product. Thus, they ended up with a \$20 gift card and two products that they could sell online for cash. With this information, the retailer took disciplinary action and broke up the group, saving an average of \$50,000 a month.

Hidden Demand Opportunities

An account team for a major CPG organization relied on a traditional analytics system to help it find opportunities to improve sales and services. Despite producing millions of dollars' worth of sales per year, the process involved extensive reports and few actionable insights. The organization's employees had to interpret reports via business intelligence systems and by hand to find the insights and determine how to act on them.

The organization eventually replaced their old system with a prescriptive analytics solution. Within two weeks of going live, the prescriptive analytics solution uncovered nearly \$2 million worth of unrealized business that the previous system and processes had missed. It located these opportunities in less than two hours—a significant improvement from the 21 hours the old system required.

The new solution also sent out a prescriptive action for each opportunity to the appropriate stakeholders, telling them exactly how to act on the findings to increase sales and profits. This improved workflow has helped the retailer significantly increase productivity and revenue. The solution also improved the CPFR process between the organization and its clients by introducing plain-language directives, rather than endless reports.

Analytics without action is hallucination. The above are only a few examples of the transformative power of actionability on simple data. By adding corrective actions to the analysis and interpretation process, data trends and patterns become actionable insights that retail employees at any level can use to improve revenue and strengthen profits and margins.



Act on your retail data. Visit zebra.com/prescriptiveanalytics



NA and Corporate Headquarters
+1 800 423 0442
inquiry4@zebra.com

Asia-Pacific Headquarters
+65 6858 0722
contact.apac@zebra.com

EMEA Headquarters
zebra.com/locations
contact.emea@zebra.com

Latin America Headquarters
+1 866 230 9494
la.contactme@zebra.com