



# How Mobile Business Intelligence Drives Efficiency and Transformation for Supervalu

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## Overview

Supervalu Inc. is one of the largest grocery and pharmacy companies in the United States with over 2,500 retail locations. In 2012, Supervalu earned over \$36 billion in revenues and ranked #75 on the Fortune 500 list. However, the company has faced numerous challenges in recent years. “We’re in a turnaround,” says Wesley Story, Supervalu’s Group Vice President of Consumer Insights and Loyalty. “In a state of turnaround, you get opportunities to do transformational things. We’ve got a great opportunity in front of us.”

To enable a successful turnaround, Supervalu recognized the need to look at their data in new ways and seek out opportunities to improve efficiency, productivity, and revenue. To do this, the company required an agile business intelligence tool that could:

- Support mobile data access to improve day-to-day operations
- Align the organization around a single, comprehensive view of data
- Quickly define and iterate on new metrics
- Draw simultaneously from multiple in-house and third party data sources
- Assess data opportunities without extensive up-front IT investment
- Accelerate the work of analysts and business users with self-service functionality

Enter Tableau. “As a culture Supervalu is definitely going through some transitions,” says Shawna Thayer, Vice President of Consumer Insights and Strategies. “We are moving to a much more data-driven, data decision driving kind of culture, which is why I think it’s the perfect opportunity for something like Tableau. It’s the perfect time to have a tool like this.”

This case study explores how Tableau has enabled a more mobile and collaborative approach to data at all levels of Supervalu’s organization.

## Mobilizing Data

Because Tableau can be used on any tablet or smart phone, Supervalu has been able to deliver the benefits of real-time data to on-the-ground personnel. Each of the company’s individual store directors and distribution center managers now enjoy access to Tableau dashboards on an iPad that they can carry with them throughout the day. Story paints a picture of how the transition from printed reports to mobile business intelligence is transforming the work of these employees.

“Imagine you’re walking around the distribution center, you’re visiting with people, you have rush orders, you have planned orders, full truckloads, partial truckloads, and you’ve got all that data at your disposal right now to see what’s going in, what’s going out, what your labor levels are in the warehouse—all that kind of stuff. It’s all in your hands and at your fingertips on the warehouse floors, versus the way it used to be was you’d have to go way upstairs into this back corner office to pull up your computer and fire up some of our old-school BI reports that might take a few minutes because they are pulling big data queries. The story we used to get is they’d go get coffee or a bagel and then come back to their desks to see the reports. Then they’d print them out because they wanted to carry them with them. But now that data is static, so they’ve got a printout from this morning and it doesn’t have the movements that have happened throughout the day.”

The value is similar for store directors who manage large, busy retail groceries with hundreds of employees. With live data on a mobile device, they can track employees, vendors, and inventory throughout the day. If they notice a problem with a vendor, they can send a message instantly without going upstairs to an office. This allows them to spend more time on the floor interacting with employees and customers. They can also respond in a new way to customer inquiries .

For example, if a customer complains that the store doesn’t have the type of tomatoes he prefers, the store director can check on that in real-time. They can work

with the department manager to look through inventory, sell-through, sell numbers, margin, and other data on the spot. “You’ve got the power of now,” Story explains. “You’re in the customer’s face. You’re having a new type of customer engagement opportunity. It’s that proximity and in-the-moment thinking that retail is all about.”

## Bringing Disparate Data Together

By its nature, Supervalu’s business generates extraordinary quantities of data. This data piles up along every point of the value chain from ordering, forecasting, inventory management, and supply chain hand-offs to point of sale transactions. Customers visit an average of once or twice a week and each of these transactions has rich data associated with it, including items bought, promotions, taken, coupons used, composition of the basket, and so on. “That’s what makes it really interesting and challenging, and quite frankly just fun, working in grocery retail,” says Story. “It’s an extremely data-rich organization.”

So, how can a company harness all this data and align their business around a “single source of truth”? This is no small task. Before Tableau, Supervalu had ten different business intelligence tools. Their primary tool, which they still use extensively, was “great as a bulletproof BI platform,” but did not have the capability to build new reports rapidly or iterate in a timely fashion. It was also unable to reach into disparate data sources and create mash-ups without significant IT overhead and complexity. The other BI tools were focused around specific functional areas of the business, such as financial modeling.

Tableau enhances and unites Supervalu’s BI strategy with an overlay of flexibility. It allows them to analyze and visualize data quickly no matter where that data is located or how it is formatted. Internal data sources include spreadsheets, CSV files, XML files, Oracle databases, pricing systems, and Teradata, just to name a few. Tableau can also support mash-ups with third party data sources like U.S. Census data and weather pattern information from NOAA.

“That’s part of the beauty of Tableau,” says Story. “We’re able to use the data where it lies today. We don’t have to worry about doing the data schema and mapping it and then moving it into a central repository. I don’t have to grow my Teradata instance necessarily. If we find that it becomes a very valuable metric or measurement or dashboard or view or whatever it is, then at that point we might think about moving it and creating a more rock solid, robust, centralized core. But we don’t have to do that upfront to see the value.”

Supervalu isn’t looking to replace all of its existing BI tools. The strategy, says Story, is “use the best platform for the particular problem you’re solving, instead of trying to say here’s the one tool for the entire enterprise.” However, the company has achieved significant cost savings and dramatically improved clarity throughout the organization by going down to four primary BI platforms and leveraging Tableau as a “master location” for most of their key data.

“We’ve literally titled Tableau the ‘source’ for a lot of various customer and market level information,” explains Thayer. “Rather than having teams across the enterprise going to different locations to get information about the market, or consumers, or business health, we’re using Tableau to create one centralized view that everybody can go to.”

## Enabling Collaboration

Tableau is also improving collaboration across multiple groups at Supervalu, including marketing, merchandizing, supply chain, and finance. In addition to over 30 analysts and power users who are creating visualizations with Tableau, the tool is making data more visual and accessible at every level of the company from retail employees to C-level executives.

“The old traditional BI model was just give me your requirements and I’ll do it for you,” says Story. “That’s one of the transformational points for Tableau. It’s a self-service BI platform, a visualization platform. It does the organization no good if we just do it all for the business instead of saying, ‘hey, look, this is how you can actually get to the data you want without having IT as a bottleneck.’”

The process of adopting Tableau has contributed to a growing culture of data-driven problem solving at Supervalu, even among business users who were fearful of the tool at first. According to Story, most users find that Tableau is much more powerful and easy to use than they expected. Often they come in with a particular business problem that they've been trying to solve for some time. They sit down with an expert and get an answer from Tableau in minutes or hours. "We're able to solve the problem and show them how to do it," he explains. "That's the recipe for success in my opinion."

Supervalu has driven a lot of this success under an initiative they call "free the data." The goal is to provide the right analysts within the company with the right data at the right time, without users having to write SQL or create Excel spreadsheets to explore that data. "We're able to have the basic facts ready, available, and presented in a visual way, so that people can come to their conclusions more quickly," says Thayer. "It cuts a whole big step out of the process."

Tableau visualizations have also helped to reduce the common problem of "analysis paralysis". With previous manual reporting processes, the default approach was to pull data at the most granular level "just in case you had to go there," but seeing all the data simultaneously was often overwhelming. Now analysts typically start by looking at high-level overview visualizations, and they can filter or drill down if they see something interesting. The source data is all there underneath the visualizations.

"That's helped our analysts get out of the weeds and see the greater picture, but without losing the functionality of being able to get into the weeds when we need to," Thayer explains. "That helps us in terms of storytelling and trying to tell that full picture, but it also helps us on the second front in terms of saving resources, saving time, and allowing us to get to that answer more quickly."

## Tangible Results

To summarize, Supervalu's new, more flexible approach to BI with Tableau has driven significant results in four key areas:

- **Time savings.** Supervalu can now produce new views of data in a matter of days or weeks, rather than months. Analysts and business users save time by getting to the data they need faster, and employees in stores and distribution centers save time by having data at their fingertips on mobile devices.
- **Cost savings.** In addition to the obvious savings of going down from ten BI platforms to four, Supervalu is making progress at driving cost savings and efficiency in business processes across all functional areas through smarter use of their data.
- **Improved analytic efficiency.** Tableau dashboards provide an indexed record of all the visualizations and analyses that Supervalu has produced, including the associated analytic commentary. Instead of "PowerPoint hell," the company now enjoys a searchable historical repository that virtually eliminates rework.
- **Better decision-making.** Users at every level of the business can more easily access the information they need to make smarter decisions in real-time. This includes everything from high-level strategy to which SKUs get stocked at an individual store.

It all goes back to the initial goal of being able to explore opportunities without having to push each initiative through an expensive and time-consuming IT pipeline. "First you want to see if it's valuable, put it together, see if you get some traction on it," says Story. "Then when you get some traction on it, and only then, do you say, 'okay, how do I make this more bulletproof and more performant?'" That's essentially what the strategy has been."

## About Tableau

Tableau Software helps people see and understand data. According to IDC in its 2012 report, Tableau is the world's fastest growing business intelligence company, Tableau helps anyone quickly analyze, visualize and share information. More than 10,000 organizations get rapid results with Tableau in the office and on-the-go. And tens of thousands of people use Tableau Public to share data in their blogs and websites. See how Tableau can help you by downloading the free trial at [www.tableausoftware.com/trial](http://www.tableausoftware.com/trial).

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