Case Study: Profiting from New Insight with Self-service Business Intelligence

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The Challenge

A Fortune 50 retailer was committed to developing self-service business intelligence (BI) capabilities across its organization to boost efficiencies in inventory, marketing and sales. But initial efforts to implement the project had met with limited success, placing its BI roadmap at risk. The retailer engaged Point B to help identify the technical and business skills required for a successful project outcome. After demonstrating our knowledge of our client's business and our BI expertise, we were further engaged to execute on the company’s retail strategy, and to craft technical and functional solutions using Hadoop and Tableau.

Focusing on business needs

What business insights would drive better day-to-day decision-making? To identify them, Point B engaged stakeholders across the organization in retail planning, pricing and promotions; profit recovery; and supply chain. Our collaboration yielded a list of questions in areas where BI can add valuable insight into the business, including:

- How do actual sales this period compare to the current plan, forecast and same period last year?
- How effective were the promotions during the current ad cycle against forecast, and the same period last year?
- Which promoted products perform best—and to what extent did they drive incremental sales and incremental profit?
- How are my private brands performing against national brands in each product category? What are the opportunities for pricing, penetration and share growth?
- What are my opportunities for profit recovery when examining operational metrics of shrink, waste, returns and price modifications?

To meet the tight timelines of the project, Point B brought skilled resources, each capable of filling more than one role across product management, data warehousing and visualization development. Our blend of skills provided the foundation for an agile team that was able to engage business stakeholders and immediately translate business needs into technical solutions.

Integrative solutions

Handling large data volumes from diverse business domains was a key requirement for this retailer. We integrated data sources and harmonized data grains from sales, budget, pricing, promotions and inventory to create correlative data
sets capable of deriving business answers and insights.

Our greater challenge was to shape these large data sets to work efficiently in Tableau and its data engine. We created pre-joined and pre-aggregated contextual data sets in Hadoop to offload Tableau’s data engine workload so that Tableau can provide a truly interactive user experience.

Our client’s people were critical to this successful solution. Point B promoted and trained employees on these new analytic capabilities across business functions. Management teams and analysts recognized the immediate value of self-service BI, which led to enthusiastic adoption and the need for additional Tableau licenses.

**Actionable insight at a glance**

Knowing the technical side of self-service BI is one thing; Point B also translated strategic business needs into a technical solution that works. Our client is now able to:

- View comparative sales performance results at various merchant and product granularities, and visually identify performance gaps against plan, forecast and prior periods.
- Analyze promotion effectiveness far more efficiently and in greater detail at aggregate, per-unit and rate-value levels.
- Plan for more effective pricing and promotions with correlative and what-if scenario analysis.
- Benchmark private brand performance against national brands in various product categories, and identify opportunities for penetration and share growth.
- Identify anomalies in store operations to guide efforts in profit recovery.
- Help analysts gain new levels of workload efficiency and bandwidth by eliminating data preparation tasks. Tableau workbooks created the bandwidth for analysts to focus on analysis and explore novel business hypotheses—the roots of innovation.

Our client’s new self-service BI capabilities enable its management team to quickly assess how pricing and promotions affect the bottom line and planned incremental profit. With continuous access to useful data in meaningful forms, our client has the operational insight to identify opportunities that will improve margins and drive innovation.