

Promotion Effectiveness & Fraud Detection

National Retail Chain

Datavibes helped a large department store format retailer:

- *Reduce store return rate by 12%*
- *Implement Customer Lifetime Value analysis programs*
- *Implement analytical models for print campaign Effectiveness; current Y-o-Y yield grew ~28%*
- *Analyze > 80 TB of Vendor, Sales and Product data*

Company Profile

The client serves customers at more than 1,675 stores nationwide. The company is committed to providing a fun and convenient shopping experience with access to unique and differentiated products at affordable prices.

Business Needs

The company was seeking to *partner* with an organization that could offer in their words, "**adequate technology depth but more importantly a core understanding of their business challenges**" to help them:

- Understand the impact of direct mail catalogues and flyers.
- Develop an analytics model to understand the relationships between the various "Customer influence" elements.
- Enhance In-store inventory management.
- Evaluate the impact of P-O-P advertising and promotions

I2I... Transforming information to insight

Datavibes helped the company develop key analytics for:

- Point-of-purchase advertising Impact Analysis
- Customer Flow and Purchase Analytics
- Coupon Effectiveness Analysis
- Fraud Detection and Leakage Management

Solutions approach

Datavibes was engaged by the marketing group to develop the key measures to analyze the impact of recent marketing programs on consumer behavior. The project expanded to include various aspects of leakage and fraud management.

Datavibes developed an integrated approach to help the company develop statistical models and the technology platform to collect, analyze and present information to the key stakeholders. The Datavibes team developed test and control group models of consumer behavior and same store comparison data. Different consumer groups were exposed to different product promotions. The expected and actual buying behavior was compared with historical data to identify and isolate the real drivers of consumer behavior.

Shopping bags, carts and shelves in the test stores were specially tagged to collect information on traffic flow through the stores, impact of recent promotions on the flow patterns and the effectiveness of various cash versus non-cash promotions.

In addition to this, data from the point-of-sale systems was integrated to complete the analysis. Our consultants recommended an analytics-led data warehouse model strategy that would help the managers visualize the solution impact as the appropriate technology solutions were being deployed.

The following technologies were used for the project:

- SAS Statistical Suite
- Microstrategy
- Symbol Hardware
- Oracle Database
- Business Objects Analytics Engine.