



Consumer Product Companies: Business Intelligence Case Studies

Promotion Planning and Analysis

In today's competitive business environment, marketers seek to maximize the benefit received from each promotional dollar spent. Although most are trying to rely less on gut feel and more on the massive quantities of data they gather and purchase, making sense out of all that information is difficult at best. Business Intelligence (BI) systems that can integrate data sources, consolidate information, and sort out what is important to the user, can offer a competitive advantage. Accurate, timely information allows a company to better predict future changes in the marketplace and develop proactive strategies.

Planning and Execution

In an effort to improve the execution of trade promotions in the field, a Global 1000 consumer product company asked ACG to help them develop a promotion planning process. They required a system that could integrate external syndicated data with internal data, as well as one that was flexible and easy to use.

ACG provided them with a powerful, intuitive tool that enables field account planners to weigh the cost of different promotional activities against past sales results to more accurately predict the impact of future trade promotions. Using a combination of purchased scanner data and internal shipments data, the sales force is able to examine the actual effectiveness of prior promotions while planning future trade spending. The system is tailored to specific accounts, which gives each sales representative very accurate information about how a particular promotion has performed in the past for his or her customers.

Money Saved and Goodwill Earned

By allowing the field sales force to compare different trade promotion scenarios and to choose the ones that will be most profitable, this application has saved the

client company millions of dollars in excess trade promotion costs. It has also allowed the sales force to determine qualitatively and quantitatively which promotions will be most appealing to the trade. One module of the application even allows the trade to compare promotional offers between competitors within a category to help them decide which deals to accept from each manufacturer. The new process has improved the productivity, accuracy and results of promotion planning in the field.

Cost Analysis and Planning

ACG was asked to design a complete activity-based costing system for a major consumer product company that wanted to improve the accuracy of its product costing process. They required a system that would let them analyze and forecast costs at both the SKU and pack levels.

Useful and Versatile

The manufacturing cost analysis application ACG designed was a versatile, nontraditional implementation of Oracle Express. Users can:

- Forecast and analyze profitability.
- Translate sales forecasts into raw materials requirements and costs.
- Perform what-if analysis to determine lowest cost of production based on scenarios for different plants with different cost structures.
- Execute detailed overhead, fixed, and variable cost allocations.
- Compare manufacturing costs with those of competitors.

Increased Competitiveness

The system provides reporting and analysis modules that allow users to examine production costs by plant

and to forecast profitability. The application also enables the client to assess the possibilities of market entrance, determine the effectiveness of pricing strategies, and manage overhead, fixed and variable costs through activity-based measures.

Sales and Marketing Analysis

A major consumer product manufacturer asked ACG to build a custom user interface to access a broad range of internal and external data for reporting and analysis. With many large and complex product categories to monitor, this company needed a system that exactly matched their well-defined analysis style.

ACG designed a flexible and user-friendly system utilizing Oracle Express. The master databases for each product category are stored on a mainframe. Subsets of these category databases are downloaded to the LAN on a monthly basis. Users have the application code and database dictionary on their local PCs. When data is needed for reporting and analysis, queries are made either to the mainframe or the LAN. This client/server structure avoids data replication on user PCs, simplifies database maintenance, and makes the best use of corporate computer resources.

Special Feature: RoadTrip

Although many people use this system from their desks where they have access to the LAN and mainframe, it was necessary to enable users to load data on laptop computers for use outside headquarters. ACG developed a 'RoadTrip' module that allows users to extract a slice of the data for their product category and take it with them to the field.

Sales Response Analysis

Statistical models of sales response can help consumer product companies understand the factors contributing to historical fluctuations in sales volume. By providing quantitative estimates of the relative impact of different marketing mix elements, these models enable companies to fine-tune future marketing and promotion strategies. Analyzing the factors which have his-

torically driven the business also helps to better predict future sales volume.

Automation and Integration

A Global 1000 consumer product manufacturer wanted to replace its existing sales response analysis system, which required a mosaic of tools and considerable manual data entry. They approached ACG with the objective of developing an application that was more automated and integrated than their current collection of tools and data.

ACG designed a user-friendly application using Microsoft Visual Basic as a front end to a Personal Express-based syndicated data repository. The system enables users to build models that explain the various factors that influence sales volume, such as price, distribution, advertising, trade promotion, couponing, and external factors, such as competitive activity.

Sophisticated Functionality

The majority of the data contained in the system is weekly scanner data for selected markets and products. A Microsoft Excel™ interface is provided for ad hoc entry of data from other sources. This gives users the ability to supply information on external factors such as weather events, strikes, or unusual competitive activity.

The system performs multiple regression analysis on independent variables chosen by the user, with sales volume as the dependent variable. Users can control for seasonality, pool data from multiple markets, and transform the dependent and independent variables in a variety of ways, using logs, lags, and decay functions.

Once a model has been estimated, reports and graphs provide diagnostics on the model in terms of goodness-of-fit and validity. Reports and graphs also explore the implications of the model, including elasticities, trade-offs among explanatory factors, and predictions of future sales levels.