



Telecommunications company increases marketing response rates by 100 percent

Challenge

To obtain the greatest value from its marketing budget, BT (formerly British Telecommunications) needed to identify customers' propensity to purchase and then calculate their likely comparative value once they became customers. After creating accurate customer profiles, BT intended to develop new products targeted to specific customer groups.

Solution

BT selected PASW Modeler to analyze data and build exploratory models for its "Business Highway" campaign, which was aimed at small business customers. The expected results? A higher response rate to marketing campaigns, increased product revenues, and an even greater market share for the company.

Results

- Improved direct mail campaign response rate by 100 percent
- Provided sales and marketing with a targeted "best prospects" list

The once-peaceful telecommunications industry has turned cutthroat. BT, a former monopoly, is a leading supplier of local, national, and international phone and data services in the United Kingdom. With annual sales of \$29 billion, it also competes with other U.K. telecommunications companies. To retain its customers, gain new customers, and maximize sales, the company needed facts about exactly who was buying its products and services.

To identify these customers, the company established a customer and campaign analysis team, headed by Senior Consultant Stephen O'Brien, within its business connections division. The team's first assignment was to model customer profiles for BT's Business Highway product, which provides small business customers with three telephone numbers, one standard and two digital, on a single line. The launch included a major direct mail campaign and national media coverage.

At-a-glance

Country: United Kingdom
Industry: Telecommunications
Date founded: 1969
Company type: Public (BTY)
Revenues: \$29.5 billion
Employees: 104,700

Application

Campaign optimization
Customer segmentation

Solutions used

PASW® Modeler*

* PASW Modeler, formerly called Clementine®, is part of SPSS Inc.'s Predictive Analytics Software portfolio.

Finding hidden patterns with data mining

To mine the data sample and find underlying patterns and trends, BT selected PASW Modeler, SPSS Inc.'s rapid modeling environment. O'Brien called PASW Modeler "a data mining toolkit" because it offered his team a wide range of analytical methods, including clustering, neural networks, association rules, and decision trees. It also easily handled common data problems, such as outliers, missing data, and low-value data.

Analyzing data and building models

The team used PASW Modeler as its primary product for data analysis and experimental modeling. During data analysis, the team employed PASW Modeler to identify data quality issues, become familiar with the data and data distribution, and eliminate data attributes not strongly associated with the purchase of Business Highway. Then it measured the predictive strength of individual data attributes in relation to the customer's propensity to buy the product. For example, two-digit district codes, a geographic indicator, were clearly linked to response and purchase data.

After the analyses, the team quickly built and tested a series of experimental models using PASW Modeler decision trees. The product's greatest strength, said O'Brien, is that "you don't get lost in the data mining project. PASW Modeler reduces the cost of failure by letting you try out lots of ideas quickly and eliminate them from consideration. You can build many explanatory models over a few days."

Identifying a targeted "best prospects" list

"The main output of PASW Modeler is insights about the data—that's what data mining's all about—and visual representations of those insights," O'Brien said.

"Our deliverables to sales and marketing were lists of customers and charts showing why these were the customers they should speak to about the Business Highway product," he added.

Improving direct mail response rate by 100 percent

"The Business Highway project raises issues about how you can benefit from using data mining in business. With PASW Modeler, the exploratory data analysis and visualization we were able to do up front enabled us to develop satisfactory customer selection criteria. Even before completing the final models, we were able to surpass our original target—and increase the campaign response rate by 100 percent," O'Brien said.

More work remains. Next, the team plans to use PASW Modeler to identify customers who have the greatest profit potential and those customers who demand lots of attention but do not buy. In the future, the team may also try to determine consistent patterns for customer defection, often referred to as "churn."

The return on investment

Successful customer profiling requires business knowledge, the right data—and the right products. BT's modeling program enables it to target customers over the life of products and campaigns, identify trends in the changing marketplace, and improve its penetration in different market sectors. And at every step, PASW Modeler will support marketing with speedy, statistically sound analyses. The payoff? As the Business Highway project shows, better customers and higher sales.

□ "Even before completing the final models, we were able to surpass our original target—and increase the campaign response rate by 100 percent."

— Stephen R. O'Brien
Senior Consultant
BT