

## Find BTB Prospects With Cluster Analysis

*A statistical tool can reveal hidden predictors of future purchasing*

By Kurtis M. Ruf



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Business-to-business marketers must be alert to changes in their customers' organizations and in the overall marketplace. They also must find new ways to build relationships with their best customers and locate qualified prospects while reducing marketing costs.

Organizations are increasingly turning to database marketing to do this. Database marketing combines relational databases, quality data and statistical analysis to identify a company's best customers and find prospects that look just like them.

Of several statistical tools available, cluster analysis can produce dynamic results compared to other techniques at a fraction of the price. Cluster analysis is a statistical process that can be used to segment customers into clusters that share similar characteristics across a range of demographic and purchase-behavior variables.

Clustering tools have been used successfully in the consumer market, and recent gains have proved that similar tools are valuable for business marketers.

Most business owners and marketing professionals know that all the names in a customer database are not equal in value. It is fairly easy to distinguish between the repeat customer and

the customer who made a single, inexpensive purchase more than four years ago. The difficulty for businesses, until now, has been to isolate the best customers that appear to fall in the middle of the spectrum.

It is crucial to find out which socioeconomic and demographic factors are important and how they interact within the business environment. Traditional segmentation methods use SIC codes, annual revenues and number of employees to segment customers. Cluster analysis is more descriptive than traditional methods because it can reveal hidden relationships. For example, it may reveal that past purchasing patterns, economic growth and interdependency factors are far more predictive of future purchases than size, revenue or industry classification.

Customers can be segmented into individual clusters, which when combined become the overall customer profile. When companies are allowed to see different groups of customers, they can effectively target each group through individualized marketing messages.

Customer profiles are the key to effective prospecting; businesses should target prospects that look like their best customers. By using thousands of un-

derlying variables, clusters can essentially differentiate between two similar businesses in the same approximate location by comparing their differences to the universe of businesses.

For example, a company selling computer software designed for small businesses could reduce its mailing costs by eliminating large businesses and the small businesses that do not use computers. Traditional market segmentation techniques, relying on SIC codes, number of employees, annual revenues, address and other conventional demographic factors, would have been able to eliminate the companies that were considered too large – but not the small businesses unlikely to use computers.

But cluster analysis would be able to show those unlikely to use computers by revealing their purchasing habits, preferences and other traits.

Statistical models can be used to calculate how revenue filters from company expenditures into the economy even at the third and fourth level of effects, such as by county. Municipalities use these types of models to justify tax breaks used to entice companies.

Impacts of filtering dollars can produce a multiplying effect of several dollars by the time they have filtered through the economy. The multiplier

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ingredient gives clusters the power to segment businesses that have the greatest impact on the local economy.

Business Lifestyles are derived by analyzing accounts-receivable data from several companies spanning the spectrum of industries. Using input/output tables, these statistical models can effectively describe the consumption and digestion of products and services a company uses to produce its own products and services.

Once these purchase indexes are attached to a national business file, hidden relationships of the business environment are revealed. Clusters provide a detailed understanding of businesses by summarizing the life-

styles making up their universe.

The evolution of business shows many cycles. After bursts of adolescent growth, industries mature. Consolidations or shakeouts weed out the least efficient organizations. Tracking historical information can reveal key growth and problem factors that aid segmentation.

Business cluster analysis should also incorporate consumer factors, since strong correlation exists between business and consumer behavior. For example, businesses locate in areas where they can find good employees, low costs and customers to purchase their goods; consumers locate in areas where they can find good jobs, send children to good schools and purchase needed products

and services. The final demand of consumers can define the commerce footprint.

By incorporating the consumer component, business clusters can reveal hidden relationships. Additional matches allow small business owners to be linked to their home address, which results in an expanded descriptive profile that, among other things, can be used to determine credit behavior. ■

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