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# BANCOLOGY

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# THE ART OF BANK PLANNING

# bancography

## CASE STUDY: EVENT-DRIVEN CROSS-SELL PROGRAM

Both bankers and stock analysts tout cross-sell as a critical factor in a bank's profit growth. An event-driven cross-sell program represents a simple way to boost cross-sell ratios. These programs send demographically targeted offers to customers in response to specific activities by those customers. A viable event-driven program should become an ongoing, replicable process, one that the institution can execute repeatedly with little additional planning or oversight. Bancography recently helped a bank implement such a program.

This bank's program was predicated on two premises:

1. Any time a customer buys a product, the bank will acknowledge that purchase with a thank you letter.
2. Any time the bank contacts the customer (other than for regulatory purposes), the bank will present additional products that the customer may need.

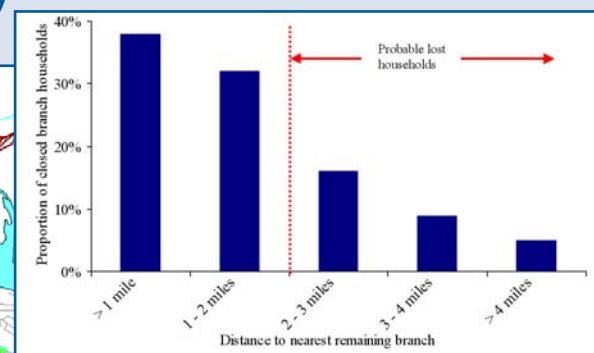
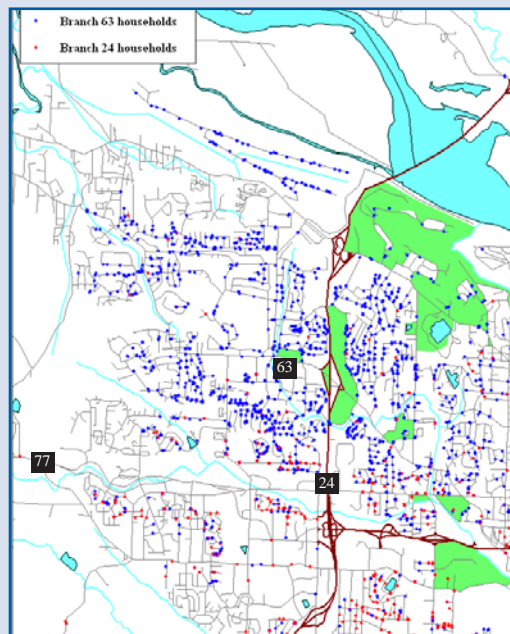
In this program, an account opening is the only event that drives a cross-sell offer. However, similar programs can respond to other events, such as CD renewals, large balance changes, loan payoffs, or customer life events such as a 65th birthday.

*Case Study continued on back page*

## BRANCH CLOSING DECISIONS

The decision on whether to close a branch is one of the most complex issues a banker will face. Branch closings obviously affect the clients of the closed branch, but closings also affect surrounding branches, and may have repercussions throughout the bank and its communities. There are two primary reasons why a bank may consider closing a branch: poor performance, as measured by financial statistics such as balances or income; and proximity to other branches.

Before closing a branch for performance reasons, the bank must first evaluate market potential to see whether the branch is suffering because it operates in a declining market, or whether it is underperforming in a viable market area. Demographic data and measures such as household penetration, projected growth rates, and deposit share can confirm whether the bank is obtaining a reasonable share of a market that simply does not offer high potential. In this case, closure may be warranted. However, if statistics reveal uncaptured market potential, the bank must first examine site issues (branch size, access, number of drive-ins) and then



staff issues before electing to close the branch. An expansion, relocation, or change of managers may leave the branch more competitive and raise its performance to an acceptable level.

In the aftermath of mergers, or as the result of poor prior branching decisions, a bank may find itself with several locations sharing a common trade area. In this case, the bank can reduce expenses by closing a branch, with minimal impact to customer service. When considering closures due to overlap, it is useful to plot customer households on a map. The example above shows that Branch 24 and Branch 63 appear to draw households from the same trade area. It is also useful to calculate the proportion of households that would find themselves far from another branch if their branch closes.

## GETTING THE MOST OUT OF YOUR MCIF

The Marketing Customer Information File (MCIF) can support many different applications. Banks use their MCIFs for profitability reporting, segmentation, direct marketing programs, and branch incentive plans. One common enhancement to the MCIF involves appending external demographic data to your client household records.

Appending demographic data to the MCIF allows customer profiling that can drive marketing, product development, and advertising strategy. Appended demographic data can be purchased from various vendors, and the data are often sold in packages. These packages typically contain up to 20 distinct variables at an attractive price. However, five specific variables will drive the overwhelming majority of consumer demographic models: age of head of household; household income; length of residence; presence of children; and homeownership. Most other variables are either autocorrelated with one of these, and therefore redundant, or too sparsely populated to be useful for modeling and analysis.

You can expect to match over 80% of consumer records in urban areas, and about 65% in rural areas, with household level demographics. Where household level matches are

not available, the vendor will append average values for the block group in which the household is located. The append record contains an indicator specifying the match level. The typical block group contains about 400 households, so block group level statistics are highly diluted. When calculating averages across your entire database, be careful not to mix block group and household level records since the values are assigned on different scales.

Appended profiling data are also available for business records. The most valuable data elements for business analysis include: SIC code, sales volume, employment, year founded, and headquarters/franchise/branch indicator. Business appends may yield only a 50% match rate, but this rate is often diluted by small non-profit organizations (for example, the local PTA) that are classified as business households on the MCIF. When you factor out these businesses, the match rate typically rises to 60% - 70%.

Canned segmentation schemes and lifestyle variables represent another type of available appended data. Watch for a discussion of these variables in a future issue of Bancology.

## BRANCH CLOSING DECISIONS CONTINUED...

There are two measures that can help evaluate the impact of a branch closing:

**Breakeven runoff** represents the proportion of balances that would need to leave to render the closure unprofitable. To calculate breakeven runoff, first calculate the total margin contribution from location sensitive products (typically checking and savings only). Then, calculate the annual non-interest expense reduction from the closure. Include only expenses that will be eliminated, and not those transferred to another branch (for example, if staff will increase at a surviving branch). Divide the expense savings number by the margin number to yield the proportion of balances the bank can lose and still benefit financially. If breakeven runoff is above 15%, the bank can confidently close the branch, as closures typically generate attrition rates of only 5% - 7%.

**Replenishment likelihood** acknowledges how likely the bank is to gain new accounts in the future that could have been opened at the closed branch. To calculate this figure, examine all households of the closed branch, and calculate the distance for each household to the nearest surviving branch. This assumes that future openings would have followed the pattern of prior openings. Tally the proportion of households within two miles (the relevant distance will vary by market type) of another branch; these likely would have opened with your bank even without the branch in question. The households that lie more than two miles from any surviving branch impound the opportunity cost of the branch closing, as future openings from those areas will likely be captured by nearer competing institutions. If over 20% of households fall outside the relevant radius of any surviving branch, the bank should question the closure.

# HOW TO MEASURE BRANCH PROFITABILITY

Most banks receive profit by branch reports on their general ledger systems, but these reports contain two shortcomings: the inability to account for transactions performed on behalf of other branches, and the deposit/loan imbalance found at most branch locations. The latter factor renders most branches unprofitable on the general ledger, since the branches are charged for large deposit bases and credited only for their small loan bases, with no credit for the deposits that are loaned out elsewhere in the company.

There are probably as many methods of calculating branch profitability as there are banks in the US. Any viable model must include: margin; fee income; operating expenses; depreciation; and some estimate of the value or cost of transactions the branch supplies or processes on behalf of other branches. Below, Bancography presents a profitability model that is simple to calculate but still yields meaningful results.

1. Calculate margin income, on a spread to pooled rate basis. For each major product group (checking, savings, money market...) multiply the branch's total balances by the spread associated with that product. The spread represents the difference between the weighted average rate paid (or earned) on the product portfolio and a fixed pooled rate, typically the Fed Funds rate. This ensures a positive contribution value for all products, and eliminates the need for a credit for deposits gathered in excess of loan volume. Your finance department can provide appropriate spreads for each product type.

2. Add the non-interest income, which can be reported directly from that line item on the general ledger. This concludes the revenue side of the calculation.

3. Next calculate expenses. Depreciation and operating expenses (personnel, marketing, utilities...) can be reported directly from the corresponding general ledger line item. Do not attempt to quantify servicing costs or fixed costs such as local or corporate overhead. Such allocations are best left to cost accountants, and they will rarely affect the relative rankings of the branches. Similarly, do not include any per transaction costs; these costs are largely impounded in the personnel costs.

4. Finally, it is essential to include some adjustment for transactions performed somewhere other than the branch of account. Otherwise, a branch with a small account base that serves many customers of other branches will appear unprofitable, even though closing the branch on the basis of such calculations would adversely affect the numerous clients who use that branch for transaction services.

Any transaction adjustment must not affect the total profit of the branch network; that is, it must be a 'zero sum' adjustment. The following process yields an equitable, yet simple to calculate, adjustment.

- a. First, calculate the checking margin income for each branch as shown in Step 1 above.
- b. Tally the total checking margin income within each market area.
- c. Then, sum the total transactions within each market area.
- d. Next, calculate the percent of transactions within each market area run by each branch.
- e. Then, multiply that number for each branch by the total margin income for the market area.
- f. Finally, take the difference between the result of Step D and the branch's checking margin income in Step A and add the result to the total income.

This process assumes that branches perform all of their transactions for customers within their market area; it neglects the impact of transactions performed for out-of-market customers. It also assumes that only checking transactions are performed for customers of other branches. By reallocating checking margin in proportion to transactions processed, the model now impounds the value each branch contributes not only through the accounts it owns, but also through the accounts it services.

The process typically reduces income at main offices and increases it at outlying branches, but it always yields the same top-of-corporation income. Since the transaction adjustment is an estimate, you may wish to state profit results on both a pre-and post-adjustment basis. In a variant of this method, you may wish to reallocate fee income as well as margin income.

Though by no means the only method of calculating branch profitability, the above steps will provide a simple but functional ranking of branch profit contribution.

## CONTACT

Is there anyone else at your institution who should be receiving Bancology? Just drop us a line at [info@bancography.com](mailto:info@bancography.com) and we'll add them to the distribution list. Please send any additions, deletions, or address changes to that e-mail address as well.

The program works through a simple grid that evaluates whether the purchase was from a new or an existing customer; what products the customer now owns; and the customer's demographics.

Each month, after the bank builds its MCIF, a saved MCIF report creates a file of all households that purchased a product that month, and codes indicating what letter the client should receive. New clients receive a 'Welcome to Metro Bank' letter, while returning clients receive a 'Thank you for your recent purchase' letter. Each letter contains two coupons offering discounts on related products and services. The letters are laser printed onto a pre-printed shell, with the text changing depending on the offer.

There are twelve product offers in all; each customer receives the two most appropriate ones. These are determined through a

simple matrix, for example: if the client owns only deposit products, and is younger than age 55 and exceeds a certain income threshold, the coupon contains a promotional offer for a home equity line. Because the matrix is pre-determined, the program runs with minimal oversight. Each month, the bank mails approximately 3,000 letters, and because of the process-driven nature of the program, the letters are mailed within four business days following the MCIF build.

This program has helped the bank in several ways. It insures that all purchases are acknowledged to the client; it presents 6,000 new product offers each month with minimal effort from the bank, and it yielded over 400 new accounts in its first six months of operation. In future months, the bank will examine the results in more detail and refine the product offer matrix as needed.

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