Prospecting's Lifetime Value Equation

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Theory

All other things being equal, the size of a catalog – or any direct marketing – business is directly proportional to the number of prospects who can affordably be contacted. Therefore, a business can achieve its full potential only by maximizing this prospect quantity. And, the way to do this is to systematically calculate customer lifetime value.

For every direct marketer, the prospect universe can be divided into two groups, proven and unproven. The proven universe is all sources from which customers are being acquired at or above a pre-defined breakeven. (As we will see shortly, "breakeven" does not necessarily mean "0 profit.") The unproven universe, by definition, is everything else.

A direct and critical link exists between this pre-defined breakeven and the size of a direct marketing business (again, all other things being equal):

- The lower the breakeven, the larger the proven prospect universe. This makes intuitive sense. As the standards for customer acquisition are liberalized, marginally-unusable lists (and list segments) become usable.
- The larger the proven prospect universe, the bigger the business.
- Therefore, by definition, the lower the breakeven, the bigger the business.

Sophisticated direct marketers have utilized this concept to justify the conscious loss of money when acquiring customers. They recognize that the cost of a customer can comfortably be exceeded by the profit flow from future orders. By losing money – that is, by investing – in customer acquisition, prospect universes are maximized and the business can reach its full potential.

Some catalogers insist on acquiring customers at a loss of $0. Others have determined that they can absorb some sort of a loss on customer acquisition, although this amount has not been systematically calculated. This is because they have taken a haphazard, even intuitive, approach to calculating lifetime value.

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If you are one of these catalogers, the bad news is that you are artificially limiting the size of your proven prospect universe; and, by definition, your revenues and profits. The good news is that – again, by definition – large numbers of good prospects remain untapped. The potential of this untapped prospect universe to spur business growth cannot be underestimated.

Many catalogers agree with all of this in theory. In practice, however, they are unwilling to fully explore the boundaries of how much can be invested on customer acquisition.

Calculating Lifetime Value

Lifetime value is a vehicle for summing the profits from all of a customer's orders and comparing this sum with the cost of acquiring the customer. With this approach, future profit is weighed against current cost. The following simplified example illustrates this process:

Consider an individual who first appeared on a catalog customer file in January 1998. Subsequently, this customer ordered four additional times before moving in February 2002 without leaving a forwarding address. (Be patient that we are assuming knowledge of future events. It will become clear why this unique perspective is appropriate.)

Order Date	Order Size	Merch-andise Cost	Fulfill-ment-Cost	Promo-tion Cost*	Over-head Cost	Profit Before Tax
January 1999	$50.00	($22.00)	($5.50)	($14.00)	($5.00)	$3.50
January 2000	$50.00	($22.00)	($5.50)	($14.00)	($5.00)	$3.50
January 2001	$50.00	($22.00)	($5.50)	($14.00)	($5.00)	$3.50
January 2002	$50.00	($22.00)	($5.50)	($14.00)	($5.00)	$3.50
Total	**$200.00**	**($88.00)**	**($22.00)**	**($56.00)**	**($20.00)**	**$14.00**

* *Total promotion cost divided by the number of orders*

The total profit before tax is $14. This $14 amount, in conjunction with an adjustment for the time-value of money, forms the basis for determining the lifetime value of the customer.

The time-value adjustment is necessary because the money to acquire the customer was spent in 1998. The profits from the orders, however, came in 1999 through 2002. Because current dollars are worth more than future dollars, these profits must be translated into 1998 dollars.

Every company should have a corporate hurdle rate to accomplish this, which is a combination of the inflation rate and the annual real cost of capital. Let's assume a hurdle rate of 15%, comprised of 2%

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for inflation and 13% for the annual real cost of capital. In other words, if a company can earn – say – 5% a year after inflation by investing in low-risk AAA bonds, it would insist on earning 13% after inflation by investing in a risky new customer.

Using this 15% discount rate, the total profit before tax of $14 for our customer translates into a lifetime value of $10:

	2002 Order:								
January 2002 Dollars: Discount Rate:	$3.50 1.15		**2001 Order:**						
January 2001 Dollars: Discount Rate:	$3.05 1.15		$3.50 1.15		**2000 Order:**				
January 2000 Dollars: Discount Rate:	$2.65 1.15		$3.05 1.15		$3.50 1.15		**1999 Order:**		
January 1999 Dollars: Discount Rate:	$2.30 1.15		$2.65 1.15		$3.05 1.15		$3.50 1.15		**Lifetime Value:**
January 1998 Dollars:	**$2.00**	+	**$2.30**	+	**$2.65**	+	**$3.05**	=	**$10.00**

This $10 lifetime value – again, defined as the value of the customer's orders in 1998 dollars – can now be compared with the 1998 cost to acquire the customer. This acquisition cost is defined as the total prospect promotion cost minus the total prospect order profit, all divided by the number of prospects converted to customers.

How Much to Spend to Acquire a Customer

The next task is to determine the maximum amount that can be spent to acquire this customer. We will continue to explore this question within the theoretical framework of having perfect knowledge of future events. This framework will give us a basis for understanding how to calculate lifetime value in the real world.

In our simple theoretical world, determining the maximum to spend to acquire this customer is easy. Because we have perfect knowledge of the future, we know that his or her worth is $10. In other words, this is a world without uncertainty. Therefore, we can afford to spend anything under $10 for acquisition. Even at a cost of $9.99, we are better off. And, anything under that is gravy.

In the real world, however, lifetime value is based on past data, which is always imperfect. Even if past data were perfect, what we are interested in is future lifetime value. And, there is no guarantee that the future will mirror the past. Declining business conditions, for example, could lower the lifetime value of a new customer to $7.

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Although there is no one correct solution, most successful catalogers spend less than 50% of historical lifetime value on customer acquisition. And, even a conservative 25% investment guarantees steady growth.

Importance of Calculating Multiple Lifetime Values

For a real-world catalog business, it is important to think not of one, but several, lifetime values. Although every business is different, the following are some general guidelines:

- Often, lifetime values differ dramatically by the media type of acquisition. Examples of media types are direct mail, space ads, television, card packs, and write-ins.
- List types can be a major factor, such as catalog, continuity, subscription and compiled.
- Also of potential importance are the type and dollar amount of the first purchase, seasonality, and whether the address is business or residential.

The point is that it is critical to identify important customer segments with significantly different lifetime values. Calculating an average lifetime value is better than nothing, but is certainly is not optimal.

A Case Study

Besides expanding a cataloger's proven prospect list universe, lifetime value analysis can also be used to alter dramatically customer contact strategies. The following case study illustrates how.

A niche cataloger had annual sales of about 15 million dollars. The dynamics of this business were similar to a continuity:

Outside rental list response rates were among the lowest in the industry. Typical prospecting campaigns pulled less than one-third-of-one-percent. As a result, acquisition costs for new customers were unusually high. Existing customers, however, were extremely loyal. Many were long-term buyers who, every year, would faithfully place at least one order.

Although solidly profitable, the cataloger's top-line had been stagnant for several years. The mission was to grow the business without sacrificing profits.

The Analysis

A large sample of the customer database was used for the analysis. Investigation revealed an overall lifetime value of $18. Men with residential (i.e., non-business) addresses came in at $16, slightly higher than women at $13. The startling finding, however, was that the small portion of the file with

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business addresses had a lifetime value of $150. These individuals were, on average, ordering well over $1,000 of merchandise.

Additional analysis uncovered that these business orders took place around the holiday season, and generally consisted of multiple ship-to addresses. The logical conclusion was that these were sales people who were purchasing holiday gifts for their customers. This hypothesis subsequently was confirmed via survey and focus group work.

Marketing Implications

A marketing task force was instituted to leverage the results of the lifetime value analysis. Members included representatives from the marketing, creative and analytical portions of the database marketing spectrum.

As a result of this task force, the cataloger began viewing business customers as a separate profit center. This profit center, in turn, was then segmented into three groups: major, mid-range, and small accounts. For each, a separate marketing strategy was developed to drive revenues and profits:

- For Major Accounts, two sales people were hired. This was done to take full advantage of an extremely high lifetime value, which was quite a bit above the overall business-address average of $150. Also, it proved cost effective to develop very elaborate prospecting packages.

  Outbound telemarketing was also pursued, and was supported by on-demand screens that summarized each customer's previous year's holiday season order. Finally, a special catalog of merchandise suitable for corporate gifts was developed.

- For Mid-Range Accounts, the lifetime value was not high enough to support face-to-face sales calls. Nevertheless, outbound telemarketing proved to be cost effective. Also, a corporate gift catalog was developed for these customers.

- For Small Accounts, the lifetime value did not justify extensive outbound telemarketing. However, it made sense to target these individuals with the corporate gift catalog.

The task force also put into effect two other significant changes for these business customers. First, relatively large amounts were spent to resolve service problems. It was recognized that assuaging the feelings of $150 customers was critical to maximizing the company's long-term profitability.

Second, investment in list hygiene was increased dramatically, because business lists are notorious for their inaccuracy. The sales force was trained to ask about and record all changes in the titles and addresses of their customers. Also, mailroom personnel at client sites were offered gifts to update the cataloger's customer lists. In short, significant amounts were invested in the accurate tracking of these very valuable corporate buyers.

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Return on Investment

What had been a stagnant 15 million dollar business was transformed within three years into a growing company doing 30 million dollars a year in revenue. Profits, which had been impressive to start with, actually increased as a percentage of top-line. By all quantitative measures, the business had been revolutionized.

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