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Profitability metrics

An important path for actuaries in competitive times

by Douglas A. French

As the pace of consolidation accelerates and competition increases, profitability pressures are intensifying. Life insurers must continually search for new ideas and techniques to gain marketplace advantage. Some insurers are looking to other parts of the financial services industry for fresh perspectives. Customer segmentation and profitability analysis have been used for years in the banking industry. Life insurers are just beginning to investigate these areas and are starting to build customer databases.

These customer databases enable the development of customer profitability metrics. Such metrics can be used to identify and target customer segments that maximize shareholder value. They can also help determine the resources expended (outlay) versus value created by each distribution channel. Finally, these metrics can be used to determine "best practices" for each distribution channel, thereby increasing customer acquisition and retention as well as the effectiveness of agent recruitment and training.

An issue facing insurance organizations is who should develop and perform the customer profitability analysis. Perhaps the best people to address this issue are the actuaries. They can work with and provide advice to many functional areas involved in developing customer analyses, including senior management, strategic development, marketing, agency, product management, and systems.

4 issues

There are four major issues actuaries must consider in defining an appropriate customer profitability metric.

The first is to determine an appropriate "profit viewpoint." Many possible viewpoints exist. Three of the most likely ones are enterprise, distribution channel, and manufacturer. Figure 1 illustrates these profit viewpoints along with examples of profitability metrics that may be considered for each. For instance, if a distribution channel viewpoint is chosen, possible profitability metrics could be commissions, distribution allowances, or allowances less actual expenses.

Enterprise viewpoints can be used to analyze data from a shareholder perspective. A distribution channel viewpoint allows analysis of the value a customer brings to the distribution channel; for example, a distribution viewpoint is appropriate if an organization wants to know which agents are cross-selling products and creating value for the customer relationship (within given distribution allowances). A manufacturing viewpoint would focus on product fees and margins, an approach that can determine which customers are profitable and identify their buying behavior. Obviously, there are other viewpoints and an infinite number of variations on profitability metric themes.

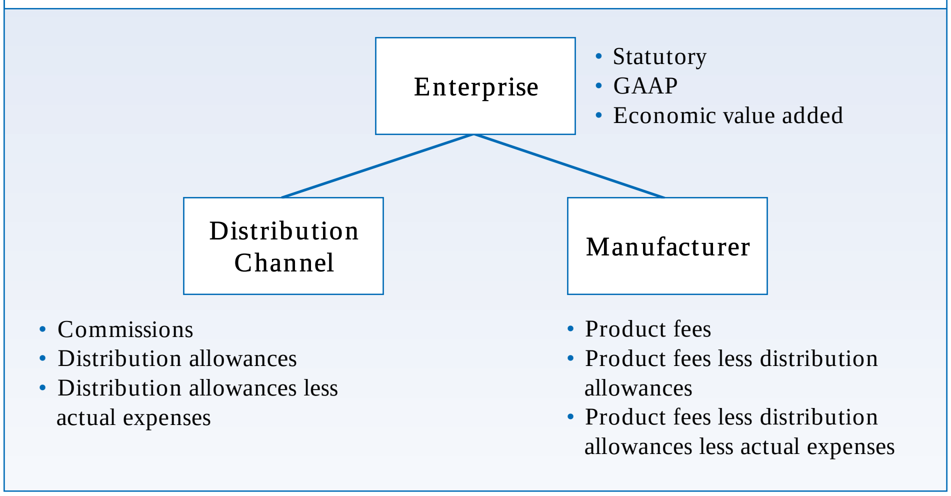
Once a profit viewpoint has been chosen, actuaries need to help their colleagues address three other important issues:

- Time period to be used for profit analysis
- Appropriate book of business to be analyzed
- "Granularity" of the final analysis

Time period: The profit analysis time period may be a specific point in time — for example, last quarter's results. Alternatively, it can take an "over time" outlook (e.g., a historic retrospective look or a future net present value look). While the point-in-time method is easy to calculate, communicate, and understand, the analysis may be distorted by acquisition costs. It may also lead to a short-term focus. The over-time method captures profitability how and when it emerges, and it ties to pricing techniques. However, it is harder to calculate and communicate. Figure 2 lists the advantages and disadvantages of both perspectives.

(continued on page 4)

Figure 1: Profit Viewpoints



Profitability metrics (continued from page 3)

Figure 2: Time Perspectives for Profit Analysis

Point-in-Time

Advantages
- Easy to calculate results for a reporting period
- Can reconcile metric to published financials
- Easy to communicate and understand

Disadvantages
- Acquisition costs may distort analysis
- Insurance contract profitability varies by contract duration
- May lead to short-term focus

Over-Time

Advantages
- "Captures" profitability how and when it emerges
- Does not require "smoothing" of acquisition costs
- Ties to pricing methodologies

Disadvantages
- Does not reconcile to a published financial statement
- Requires experience analyses and assumption sets
- Harder to calculate and communicate

Book of business: The next step is to agree upon the book of business to which the profitability metric will be applied. The book of business may be yesterday's, today's, or tomorrow's. Yesterday's book of business would include contracts currently in force as well as those that have lapsed. Today's book would comprise only contracts currently in force. Tomorrow's book of business would include contracts currently in force plus those expected to be purchased in the future.

An analysis of yesterday's book of business would provide a historical perspective of customer profitability, which in most cases is predictive of future customer behavior. Today's book of business is probably the least useful because it does not allow for the analysis of what business should have been retained or what business should be sold. "What if," or strategic, analysis is best performed on tomorrow's book of business. However, this may be perceived as too subjective because of its dependence on assumptions.

Granularity: Finally, the actuary must provide advice on how fine an analysis is needed. Granularity will depend heavily on the experience analysis capabilities of the organization. Examples of granularity are household, customers within a household, or even products within customers within households. The answer to the granularity question will determine the depth of analysis. This, in turn, will affect how the results are calculated as well as what experience analyses and assumption sets need to be developed. Figure 3 shows an illustrative cascading of profitability metric results.

The traditional role of the actuary is changing. It is no longer sufficient to focus only on technical issues. Actuaries have unique insights into the workings of a life insurance company. It is our responsibility to communicate our insights to the rest of the organization. The analysis of newly developed customer databases incorporating customer profitability metrics is a perfect opportunity for actuaries to become more proactive in working with other units to add value to the overall organization.

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Figure 3: How Profitability Metric Results Cascade