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Session #78TS
CUSTOMER RELATIONSHIP MANAGEMENT - HOW DO YOU MODEL A CUSTOMER?

Track: Nontraditional Marketing/Computer Science

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Summary: Why does CRM matter? Participants learn how customer relationship management (CRM) can leverage your company's distribution channel(s), increase sales volumes, and lead to greater customer persistency.

How do you model a customer? Actuaries are accustomed to modeling products and policies. CRM requires modeling customer relationships, and actuaries need new tools and thinking in order to achieve a strong understanding of the financial value that current and potential customers represent to their company.

MR. PAUL TURNER: It's my pleasure to introduce Michael Shumrak, head of global sales at Classic Solutions. Classic Solutions is a provider of cutting-edge financial-services modeling software that provides flexible solutions to today's complicated modeling tasks. Michael helped form the non-traditional marketing section and served as its first chairman. He also has over 15 years of experience in consulting customer relationship management (CRM) topics, with special emphasis on modeling customer behavior and customer value.

I'm director of NMG Financial Services Consulting, which is an emerging-markets specialist-consulting firm in the areas of actuarial, distribution, and strategic consulting. When I'm not sitting on planes, you might find me prowling around the streets in Latin America, and sometimes Asia, looking for customers and projects.

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Note: The chart(s) referred to in the text can be found at the end of the manuscript.

We are going to discuss what CRM is, why it matters, how to implement it, and then get to the bulk of the presentation—how to model a customer. We will also discuss what that actually means and then come up with some conclusions.

In our definition, CRM is an understanding of the dynamics of a particular customer hierarchy. What that means depends on the organization that we're talking about. I think, as actuaries, we often sit in the back office and think that a customer is the end customer. It's always true to some degree, but how much we influence the end customer might vary depending on our distribution model. Other customers might be banks that we work through—credit card companies, list holders of any type, and agents, whether they're direct agents, tied agents, or independent financial advisors, etc. We have to understand what our customer hierarchy is from the beginning of a process to the manufacturing and on down to the end placement of product with consumers.

CRM is also defining a metric to measure the value of our customers rather than policies. Policies are still important, but they're just a piece of the puzzle. It also involves learning who your most valuable customers are and who your least valuable customers are, and identifying why they are considered as such. That leads us to being able to position things differently in the future if it's helpful to the company.

That could be by defining different compensation structures for our sales forces, different service levels or types of services that our customers would value, what they deserve depending on what they're providing in terms of value to the company, and also trying to cater to our most valuable customers versus our least valuable customers. We might actually want to give less attention to customers that aren't so valuable and, perhaps, even lead to driving them away in certain circumstances.

It might also help us understand how to get into different markets or channels, use different distribution methods and providers than we currently work with, offer different products and services, and focus on our most valuable customer. In a sense, measuring the customer value will help us set the most profitable strategy for our firm and measuring our success against those targets that we set for ourselves.

Traditional product-pricing methodology helps get us part of the way there, but it really limits our decision-making scope. We may not know the whole picture, so if we can take that and build upon it, we'll go to the next level, which we call customer-value modeling.

Customer-value modeling actually looks at a lifetime value for our clients. We'll talk about what a client is in terms of the different layers in the hierarchy later. But in a general sense, customer-value modeling is not just looking at a transaction placing one product with a client, but really what their lifetime value is to the company. It

may only be one product, but it may be a series of products as we follow them through their financial years. It often tells us is that cross selling, acquisition costs, and retention are very important factors that we need to take into account as we consider the value of our customers.

If we look at the first product sale, the transaction, Chart 1 demonstrates that we may have very high initial acquisition costs. But if we can look at that client as a lifetime proposition for the company, we can see that being able to sell them more products over time, whether it's up-selling or cross-selling different products, can lead to a better financial picture for the company.

When doing CRM, it's important to understand the different segments of clients. We'll talk about what those segments are and what levels they are, but in a nutshell, we need to define strategies that maximize the value for each customer segment. If you're able to implement this, you may find that you'll be able to categorize your customers in terms of their value proposition to the company by segmenting them. This could lead to defining different strategies for the different segments of clients, which can help the overall profitability of the company.

You may find that you can give your most profitable customers even more. You really want to keep them. Your middle level of profits, in terms of client segmentation, might lead to other strategies such as cutting back on certain services, bundling services, or lowering your acquisition costs, which means keeping them without having them cost so much. If they're really bad customers, you might find that it's better to reprice the products or discontinue that channel.

In summarizing the introduction, we can say that CRM is both a strategy to increase the average profitability of our clients and a way to increase market share for providing the right services and products to our client base. We have a much better chance of capturing increased market share and improving the profitability per customer.

To give you an idea of the impact that this could have, these numbers came from a real study (Chart 2). If 70% of the most profitable customers contribute 230% of our profit in a present value sense, and 30% of our customers are actually causing us a loss of 130%, profits could increase by 130% if we move the not-so-profitable clients to equilibrium, or get rid of them in some cases. It can have a tremendous impact at a company level if done properly.

MR. MICHAEL SHUMRAK: The starting point in the process is to map your customer hierarchy starting with your most immediate link, your wholesalers and distributors, and work outward to your end buyers (Chart 3). This process will identify the various customer relationships you have to consider. For example, an insurance company might have one or more distribution channels, such as captive insurance agents and banks.

At another level, you might reach your end buyers through institutional sales initially made by your agents to employers, who in turn provide their employees as prospects, such as in worksite marketing. In worksite marketing, after making the initial sale to the employees—typically weekly premium whole life or universal life—the insurer and/or their distributor might negotiate with the employer for the right to market other product offers directly to the employees who purchased the initial life insurance offer.

Once you have completed the customer-hierarchy mapping process, you are ready for the next step. This involves identifying the key drivers that affect the responsiveness, persistency, and other behaviors that will be important elements of measuring customer value. They should be specific, measurable, and actionable. Examples might include customer life-cycle stages and their propensity to buy various products at various life stages, as well as the likelihood that they will retain these products given various degrees of product and service quality.

We want to distinguish between distribution channels and methods. Channels are captive agents, banks, stockbrokers, and the like. Methods are face-to-face, direct mail, the Internet, etc. Obviously, channels and methods can be mixed or matched. For example, customers might first be acquired by direct mailing a very simple guaranteed-issue product to bank customers. Those who positively respond to this offer can later be offered more complex products through face-to-face sales processes.

Similarly, we can analyze and identify key drivers if we view distributors as our customers. We can study the impact of our investment in recruiting, training, commissions, and other incentives on their propensity to sell larger volumes of more profitable business. This will enable us to attempt to realign our investments with first-line "customers" so that we influence them to bring us the greatest proportion of their best business in the fastest amount of time. Similarly, this will send a message to those distributor customers who do not and cannot bring us value to go elsewhere.

In addition to value drivers associated with distributors and distribution methods, we should also consider the customer-value leverage we might have in the risk-selection process. We might find that we are well positioned, either directly or through certain face-to-face distributors, to sell more profitably to segments other than the lowest-risk prospects. Priced appropriately as a segment, these markets are often under-targeted by many of our competitors.

Another key customer value driver is the relationship between service intensity and profitability. In all cases, the process re-engineering trend presumed that providing the best service resulted in profitability growth through both increased sales and persistency. However, if hand-holding is focused on self-directed customers, this investment in "great service" is wasted while these customers take their business to more insightful competitors smart enough to provide "just enough service" offset by

"better price points" by recognizing where service intensity matters and where it doesn't.

Last, but certainly not least, is the product offer, which is a combination of product design and pricing points the company offers to end buyers. Too often actuaries are forced to price to broad average customer profiles rather than to specific customer segments.

Customer segments are characterized by how they prefer to buy, why they buy, when they buy, and their perception of product value. In some segments, there are marked differences between what the end buyers want to buy and what they need to buy. Market research methodologies such as conjoint analyses can help us better understand the behavioral economics of end buyers in various buying situations. Companies who begin to gather this type of market intelligence from their most profitable customers are best able to focus their future customer-acquisition efforts on "more like these" rather than "average."

The greatest danger in the recent wave of activity and excitement over customer value management is trying to do everything all at once before having any real idea where the leverage is. Much of the CRM activity, and even some of the related customer-value modeling work, has been included in massive information technology (IT) projects where companies are trying to apply these ideas everywhere at once with no idea what the payoff may be. As time goes by, the projects take on a life of their own generating millions of dollars of investment and marginal early returns with the hope of a massive payoff in the future.
For example, if some of these companies had applied customer value driver mapping, they might have discovered that in some of their first line customer/end buyer segments, they might be in situations where they had almost no inherent chance to sell more than one product to a customer. In this case, CRM can marginally help make that one-product customer relationship more profitable, but the economic benefits of this versus other segments offering multiple-product relationship customers may not be worth the investment in the huge, ongoing, IT-driven, CRM data-mining death march.

A much more sensible approach is to figure out how to approach CRM in a focused, limited manner in order to get some fast and obvious "successes" and then build out the effort from there. For example, select a distribution channel/method/customer market segment that appears to offer significant leverage in terms of more efficient acquisition of multiple-product customers. Set specific benchmarks for measuring this in terms of the value of these customers.

For example, how much can the company afford to invest in a customer who first buys product "X", but is likely to buy product "Y" and "Z" from you. Similar frameworks can also be applied to your "distributor customers" by considering what package of recruiting, training, sales support, commission, and other incentives is

most likely to increase sales productivity by X% and drive Y% more of these distributors toward you versus your competitors.

Validate these pilots. Iterate some of them again to refine the most promising. At this point, you can begin to formulate broader statements of the likely returns on investment in rolling out larger-scale CRM initiatives across the company using customer value modeling as a key metric.

MR. TURNER: In terms of what a customer model structure might look like, we put "customer" in quotes because, again, you can come at this at a variety of levels depending on what your need is. I think, as actuaries, we also tend to think only about the insurance company that we might work for. However, some of the processes and value that CRM can deliver are best targeted at the distribution side of the equation. Sometimes the manufacturer controls distribution, and sometimes they rent distribution, so you have to keep in mind that not everything in terms of value coming out of CRM is going to accrue to the end insurance company. In fact, a lot of it might accrue to the manufacturer. So when we talk about customer value modeling and CRM concepts, we're really looking at both of those pieces—the company and the distribution channels.

What we're trying to describe is that a range of products sum up to a customer. There may be one product or there may be "n" products, but in addition to thinking about modeling products, we need to think about how that rolls up to a customer level. Also, we need to consider how the different sales channels play into selling different services through the different client bases and the financial services companies that are offering these products.

For example, if you want to look at it from the perspective of a distribution channel, that distribution channel may sell the products of a variety of insurance companies, so you need to bring in the products from a variety of companies, compensation structures that they offer, and view your modeling from that perspective.

If you're looking at a direct marketer, you might be able to go right from the insurance company down to the end-customer segment, or you may have to have a sales channel that's a bank or credit card company, and view all of the different relationships that exist there. In order to sell the products, you need to know who those customers are and segment them. But sometimes you want to know what's in it for you as the distributor. How do you maximize your value? That might run counter to what, perhaps, a single manufacturer might view. The important thing to recognize is that the main difference between a traditional product-modeling approach and CRM is that we have now introduced the concept called "customer." There are several reasons for that.

One reason is that if you model customers segment by segment, you can now introduce a new range of customer behaviors that you might not have in the traditional male, age 35, non-smoker kind of pricing cell. You can introduce

stochastic projections of lapses, deaths, and customer behaviors. What I mean is normally you're used to predicting either the sale of a new block of business or an existing block of business in terms of how many policies are in force or will be in force, but you apply a high-level assumption, such as, "we're going to have 10% lapses." However, you don't say, "This particular client is going to lapse," you say, "Out of this group we're going to have X number of lapses."

What you can do in customer value modeling is actually model at a customer level, even if it's within a segment. If you say that your segment is X and they all have certain characteristics that you've defined, you can still project 10,000 of these customers and introduce stochastic elements in order to see how the actual lapse of a product or the death of a client, or a particular customer behavior actually impacts you in an average sense or a histogram-type sense where you're looking for the variability in the outcomes as well. Customer behaviors that might vary depending on customer segments could be the propensity to lapse, the propensity to buy new products, or their propensity to act on the options that you provide them in the products.

When you have a customer model you can test things at a customer level. That means they could have multiple product holdings, and they have different lifetime cycles that they're running on, depending on the different classifications—the age groups, the income levels, etc.

When you're able to test at a customer level, you can start thinking more like, for example, Amazon.com. Although Amazon.com doesn't know you specifically, they know the kind of person you are from the books that you've been buying. I don't know if you've purchased books from Amazon, but you'll often get a message when you access the Web site the next time that says, "We noticed that clients like you have purchased these particular products." When you start doing that, you can start constructing your service levels and your product features, for example, bonus structures or expense-charge structures, etc. You can start doing things at a customer level that try to get certain behaviors you're seeking in order to increase value at the customer base. You can also design compensation structures that might vary based on customer segment.

When you think about modeling inputs, we're used to the standard age, sex, underwriting class, and, perhaps, distribution channels. Sometimes we vary lapse assumptions, or we might vary acquisition costs or service. Cost might be based on a certain distribution category that we're talking about. However, with customer value modeling, we're able to introduce a number of other assumptions that might help us understand customer behavior and design products and services that wrap around those in order to increase value. Some of these things might be:

- Life stage:
- Family status (married, divorced, single, etc.)
- Income levels
- Preferred distribution channel

- Potential range of products
- Track you might go down (not for a single individual, but as a group so you might be able to predict these things)
- Sales channel remuneration structure

Again, depending on the level of our modeling, whether we're coming in at the end-consumer level or we're coming in at the distribution-channel level, some clients like a lot of service, some clients just don't care. I don't know if any client would say they like bad service, but some of them might not value good service. We need to know that, price it appropriately, and provide the right amount of service to each type of client. There's only a fixed amount of dollars that we have available to acquire customers or service customers.

Modeling Inputs

- **Possible Life Stage Classification**
  - ◊ Age 20-29 Young
  - ◊ Age 20-49 Career-Oriented
  - ◊ Age 50-59 Worried about retirement
  - ◊ Age 60+ Retirement

- **Possible Family Structure Classification**
  - ◊ Single
  - ◊ Married
  - ◊ Divorced

- **Possible Income Classification**
  - ◊ Less than $2,000 per month
  - ◊ $2,000 - $5,000 per month
  - ◊ $5,000 - $10,000 per month
  - ◊ Greater than $10,000 per month

Determining a range of life-stage classifications depends on the particular country and market that we're talking about. I actually changed "wishing for retirement" to "worried about retirement." That might depend on your philosophy. Then, to "retirement." Again, family structure could be single, married, divorced, or any other creative things you can come up with. Income classification, obviously, is going to affect the kinds of products that you're interested in or the levels of service that can be provided, and that can be segmented into the classes that make sense.

We talk about life cycle. Again, CRM can be introduced in a variety of ways and degrees. It can be a technical exercise, but in the end we want it to be practical and useful. In terms of being able to predict a customer's life cycle and whether or not we're going to introduce our own products or somebody else's, we need to be able

to predict where they're going to be heading and head them off at the path in order to provide lead generation for our sales force, etc.

The life cycle is an input to the modeling structure that we've been discussing. Being able to not only incorporate current products, but also the range of products that might be purchased in the future, allows companies to test different strategies in terms of customer-level charges, bonus structures, etc., that don't necessarily depend on a single product. And a lot of times, especially today with financial services integration, we're talking about not only insurance products—for example, a life product and now I want to add an ADB rider to it—we could be talking about mortgage products or other banking products including mutual funds, etc., and we need a modeling structure that can permit the value into each of those pieces.

In terms of sales channel remuneration; again, we test the attractiveness of different schemes not only at the product level, but also the customer level. We do the same thing for servicing levels. We're just able to test the intensity and the value that customers assign to the service level.

I have a final comment on modeling inputs. This is just a quick idea of what a life cycle might look like in many countries from a first job through a first car, getting married, buying a house, having kids, getting an inheritance and retiring. There are different products that occur for customer needs in each of these portions of the cycle. If we're not there to offer access to these types of products, someone else might be. This just underscores the importance of looking at this not only from an insurance company perspective, but also from a distribution-channel perspective. We want to keep control of our clients.

MR. SHUMRAK: We will discuss a few examples. I'm going to start with what I call the "direct to the consumer" example. It's not the most prominent way in which insurance is currently distributed. However, when we talk about CRM and measuring the value of customers, it is in this approach that there is a longstanding history of companies successfully applying CRM using lifetime customer value modeling. Therefore, I think it is instructive to track through the nuts and bolts of their approaches because they will concretely describe the mechanics involved. Our second example is based upon face-to-face sales distribution.

Let's go through the "direct to the consumer example." To give this some context, I'm going to describe some general economics for a generic product, which might be a supplemental life, accident, or health-market offering to a lower middle to blue-collar market.

Direct To Consumer - Economics

◊ Generic protection product (term life, supplementary health)
◊ Annual Premium = $300 per year
◊ NVP of Premiums = $1,500 (discounted at earned rate)

◊ Marketing Allowance = $375 year 1 (25% of NVP premiums)
◊ Risk selection costs = $75 year 1 (5% of NVP premiums)
◊ Benefit costs = $150 per year (50% of NVP premiums)
◊ Servicing costs = $30 per year (10% of NVP premiums)
◊ Ignore inflation and all taxes
◊ Profits = $30 per year (10% of NVP premiums)

The annual premium for the life or health product is $300 per year. Let's assume the present value of the premiums at the earned rate is $1,500. The total marketing allowance is $375 in the first year. The present value of these total-marketing costs is 25% of the present value of premiums. The costs for risk selection are $75 in the first policy year. We assume that about 50% of the present value of premiums will be paid out in benefits. We spend $30 dollars a year, or 10% of premiums, on policy service and maintenance. The example ignores inflation and taxes. The net result is an expected present value of profits of 10%, discounted at the earned rate. Up to this point, we have defined what we might call traditional pricing focused on the economics of selling one policy to one customer.

CRM practitioners applying lifetime customer value modeling would not stop after considering the first sale to a newly acquired customer. Rather, they would consider how this product, as priced, might be used as the first in a sequence of potential product offers that the company could make to customers who first buy this product. In addition to other products the company might sell these customers (commonly referred to as cross sales), the company could also offer upgrades (policy benefit increases for additional premium) and extensions (using policy riders). The focus of CRM would be considering the economic benefits to the company of having multiple product relationships of this sort. The potential benefits could include:

1. Lower acquisition costs on subsequent upgrades, add-ons, and cross sells.
2. Higher customer persistency through a broader relationship with the customer and more frequent contact with him or her.
3. Lowered servicing costs by spreading per-policy costs over larger policies or even over the customer across all products they hold.
4. Developing and owning a proprietary profile of which prospects best fit the profile that delivers the benefits in the items above.

Direct-to-the-consumer CRM practitioners very carefully focus on these potential benefits before they embark on the significant time and cost to penetrate a new target market. They look for both market breadth and depth. Breadth relates to the market size—is it a few hundred or millions? Depth relates to the number and magnitude of incremental offers that can feasibly be offered to these customers—is it only one of two or dozens?

Let's discuss the economics of "back-end sales"—cross sales, upgrades, and add-ons. In direct-to-the-consumer marketing, such as direct mail, the response rates for well-targeted cross sales, add-ons, and upgrades are much higher than they are for selling into a list to get a new customer. This lowers the marketing costs, increases profit and presents the insurer with the opportunity to take some of this "extra profit" and reinvest it in terms of a more attractively priced back-end product offer.

For example, at the extreme, response rates are high and marketing costs are nearly zero when marketers insert a product upgrade or add-on offer in a billing statement. This also leverages servicing costs since, as the upgrades and add-ons are sold, the company enjoys larger policy sizes for the same unit costs. In addition to lower marketing and servicing costs, marketers often also experience lower lapses from customers who have upgraded and added on to their coverage.

In the cross-sell situation, the direct marketing response rates will be much higher than in "acquire the customer" situations. For example, the marketing cost when you cross-sell product B to the customer that you acquired buying product A, the marketing cost could be on the order of 60% of the marketing cost the first time around. The higher response rates are derived from the fact that the policyholder already knows the company and the marketer has offered the particular cross-sales product at the right time, so the customer is most responsive. The financial impact of the lowered marketing costs of the cross sell in this example is that the net present value of marketing costs to premiums on the cross-sold product is 15% rather than 25%. The profit margin had doubled from 10% to 20%. This does not include some further profit improvement if the cross sale improves customer retention.

The same basic principles apply to add-ons and up-sells. The incremental customer premium for upgrades and add-ons are typically much less than for cross sells since they represent adding incremental benefit levels to the existing policy and/or adding supplemental coverages with riders. Perhaps the incremental premiums per add-on and/or upgrade might be $15 to $45 per sale. However, the high response rates and the fact that these benefits generally do not materially increase the per-policy unit costs mean that the economics are very favorable.

Also, in many cases, depending upon the nature of the upgrade and add-on possibilities, marketers can trigger these offers very frequently–typically several times per year. Over the first few years after selling the initial policy, successful add-ons and upgrades can increase in-force premiums, profit margins, and profit dollars per customer dramatically.

As wonderful as this sounds, one must always consider the targeting-the-market issue. If you select markets with too few customers or with too few back-end selling opportunities, the leverage in CRM is much less dramatic.

Refinements to the CRM/Lifetime customer value approach would be to consider how low you could price your "acquire the customer" product offer to more deeply penetrate a target market. In other words, you might consider accepting profits on the first sale in order to acquire a customer. These profits are worthwhile even though they are less than your ultimate target based upon lifetime customer value profitability that meets or exceeds your target profit. Alternatively, you could price using lifetime customer value, targeting normal profits on the initial sale to "acquire the customer" but then share the marketing, unit cost, and persistency benefits with your customers through more attractive cross sale, add-on, and upgrade offers that your competitors could not afford to match. A well-known mutual fund company found that they could offer a private label variable annuity with very low M&E charges and no surrender charges because of their competitive advantage in marketing costs (they were cross selling the variable annuity to well established mutual fund customers).

FROM THE FLOOR: I think in non-insurance businesses there are direct marketers. You see similar things where they give you several records for a dollar. They view it as just a marketing cost rather than that they're selling eight records at a loss.

MR. TURNER: I think the classic example of this strategy is the free offer in direct marketing of accidental death benefits (ADB) products.

FROM THE FLOOR: Accidental death is not the greatest financial planning product, but the beauty to a direct marketer is that the response rates are tremendously high. Not making much profit on that product, assuming you're going to sell the customer lots of other products, is a no-brainer because the premiums are so small. You're not talking about taking a small margin on thousands of dollars of premium per policy, or $50 or $80. So, to roughly break even on something that has a high response rate will get you hoards of new customers to sell higher price products to, even though it pivots off of a product that doesn't exactly have a great reputation as a financial planning need.

MR. SHUMRAK: You also see it in other arenas. Witness the example we presented of the mutual fund company able to offer a variable annuity with low M&E fees and no surrender charges because they weren't investing anywhere near the typical five to eight percent to cross sell the product to their own customers.

Let's turn our attention to our second example of CRM supported by lifetime customer value modeling approaches. We will switch gears and consider a captive agent, face-to-face sales situation. The life insurer wants to increase productivity. They have the classic "two sales per agent per week" problem.

The typical incremental CRM approach would be to consider some re-engineering to help the agents get better leads and provide this to all agents regardless of their reaction to the program. A better approach would be to link company-derived improved lead generation to some quantitative measure negotiated with agents

interested in improving productivity. The measurement will be used to both validate the effectiveness of the program and serve as the basis for an offset to their current compensation. This would be fair because the company would have invested and successfully developed a lead generation approach that improves the agent's opportunity to close more sales faster. Certainly a significant portion of the value of this improvement should accrue to the company. There are some successful examples of this approach, but in other cases, the politics are difficult. In many cases, the established agents are happy to accept the improved lead process but are not willing to lower their commissions. They expect it as an added benefit of bringing their business to the company.

Captive Agent – Economics

- ◊ Generic protection/savings product (UL)
- ◊ Annual Premium = $2,000 per year
- ◊ NVP of premiums = $10,000 (discounted at earned rate)
- ◊ Marketing Allowance = $2,500 year 1 (25% of NVP premiums) all sales commission (125% of premium)
- ◊ Sales servicing allowance = $150 per year (7.5%)
- ◊ Risk selection costs = $500 per year 1 (5% of NVP premiums)
- ◊ Benefit costs = $1,000 per year (50% of NVP premiums)
- ◊ Servicing costs = $50 per year (2.5% of NVP premiums)
- ◊ Ignore inflation and all taxes
- ◊ Profits = $30 per year (10% of NVP premiums)

Let's put some numbers to this situation to make it more concrete. Assume the captive agency force is selling a generic protection savings product, a universal life (UL) product, with average premiums per policy sold of $2,000. The present value of premiums at the earned rate is $10,000. The total marketing allowance is all sales commission and is 125% of the first year premium and 7.5% of premium sales servicing in all years. Assume risk selection is 5% of the NPV of premiums. Benefits will be 50% of the present value of premiums and policy services costs of 2.5% of premium, resulting in an expected profit if premiums are kept fixed of 10% of premiums.

With regard to sales production, we assume that our captive agents make two sales per week or about 100 per year, which results in $200,000 of new premium production per agent per year. We would like to improve productivity for the agents so we generate more volume and also lower our percentage of premium sales costs by capturing a portion of the value the new lead-generation program produces.

In a CRM/lifetime customer value construct, just like the direct marketing company in the first case, we want to determine which of our captive agent "customers" are most likely to positively follow up on our lead program and also value it by considering lower first-year commissions.

In the pilot test of this CRM approach, we reduce the commission rate from 125% to 100%. This reduction in commission rate provides us with a $500-per-policy-sold expense allowance to fund the lead generation initiative. We know that if the program only breaks even for the producer, we wouldn't have succeeded because even through productivity is up, the agents' earnings haven't increased. The lazy ones might be happy to hit the golf course earlier each week and then our sales productivity will remain unchanged.

If the results more than break even, we have something to work with. We can give some incentive to the ambitious agents by making it possible for them to earn more money faster by focusing more time on closing versus prospecting. The company generates more sales faster for less cost, which improves revenues, margins, and dollars or profit.

The next step would be to refine and pilot through further limited testing within a small, select group of agents.

We assume that the producers won't be pleased with giving up commission points in this arrangement unless they have reasonable expectation that they will more than break even. Therefore, we target the program to produce better than break-even results.

To test and validate that we can attain targeted productivity, we first pilot the program with a few selected producers who have shown some interest in the program. We would track the difference in sales process progression from lead generation to sales closely between our new approach and this agent's current sales process. Not all producers are created equal. We will see that some will follow up on these leads, close sales faster than before, but then head for the golf courses earlier in the week, while others will use the leverage of our program to increase their earnings.

The idea is to profile those producers who get the most value increased earnings and give the company the most value in terms of larger volumes of higher margin business. Over time, we fine tune the lead generation and modified compensation structures to optimize the effect it has on producer and company earnings. Ideally, if some of the value generated by the program can be put back into the product, we can also improve product quality to add more leverage to the approach.

In roll out, we would use the lead-generation and product-profiling approach to drive our best producer's behavior and also as a template for recruiting new producers most likely to fit the "most valuable producer" profile we have developed. Over time, as those producers who don't participate in the program go elsewhere, either through failure or inflexibility to try to new approach, the company's producer profile trends toward a group largely backing the new approach.

In conclusion, modeling customer value is a multi-step measurement process. You start by identifying who your most valuable customers are, the key factors that drive the most value, and what products and services might drive more value from them. Next, you determine the size of your potential "most valuable customer" market in order to determine how much you can grow it. Have you already saturated the market or barely scratched its surface? As the final step, you use your customer value modeling capabilities to determine how much you can afford to invest to acquire more "most valuable customers."

MR. DAVID HANZLIK: (Allstate Life Insurance Company) I was wondering if the panel could address non-traditional profit or pricing factors. You discussed offering different bonuses, expenses, or loads to different customers. I thought, "Well, there's certain things you can't do that for, such as race." Can you address some other customer factors we wouldn't be able to price and delineate upon?

MR. SHUMRAK: I think a person's race is one. I also think you have to be careful with gender. In some of the work that I've done, for example, we target young professional women. But you still have to be careful.

I think the only other constraint that I've run into in my experience is certain benefit combinations and structures that state and insurance departments just won't be happy with.

I've done a lot of work with something called returned premium or money back, which we actuaries wouldn't want to invest our money in. But in certain markets we like to talk about product offers instead of products. So to me, a product offer isn't just some hospital indemnity or some variable annuity. It's the combination of the benefits and the options within the benefit. But there are certain benefit combinations or benefit features that certain states don't allow because the benefits were abused historically in other situations.

MS. THERESA RESNICK: (Combined Insurance Company) When you look at customer contact streams, which are essentially what we're showing here, I think it's a pretty significant effort to model it in a spreadsheet. I'd like you to speak to the tracking systems that have to be built to follow these customer contact streams through. Maybe you can also speak to what it takes to build those things so that you can see whether or not what you've priced and what you've modeled really is coming through.

MR. MICHAEL SHUMRAK: To date, most of the practical applications of customer value modeling have not been focused on customer-by-customer or seriatim methods, but rather on supporting customer acquisition and cross-selling strategies based upon model points or even aggregate representations of the targeted customer.

Let's talk through a brief example of this. We helped a large diversified financial services company consider their approach to several carefully researched niche markets such as young professional women and certain ethnic market segments.

Being diversified, the company had the capability to offer virtually every type of financial services product to these segments including life insurance, health insurance, annuities, mutual funds, personal lines P&C, and bank products. We helped them develop lifetime customer value models that played out which product offers they might use to acquire the customer and which products they likely would offer as cross sells.

The customer value model was used to rationalize how much the company might prudently invest to optimize segment penetration to achieve a lifetime customer value financial objective with secondary constraints such as not "losing money" on the first product sold to acquire the customers. As the business was launched, these "expected" customer values were systematically to be replaced with actual values for those products that had been sold "to date" versus those still "expected" to be sold. The models to support such a process were complex. They had to track not only the various customer product offer sales tracks, but also be able to handle the differences in accounting treatment afforded various financial services products.

MR. TURNER: I would agree that at this stage, for a lot of companies, the first step is more of a pro forma of what the value of your customer base could mean from a segmentation standpoint. It may change as time goes forward and companies have convinced themselves that the value is there for them to pay the dollars necessary to actually have their client databases structured in a way that can produce real-time, realistic information.

From a historical standpoint, I think that's coming for those who have made the determination that they can afford it. But most of the work that we've done in distribution consulting at this stage is to identify the value of distribution channels based on what they can do with the access to their customer base. It's been less of comparing that with historical experience because companies haven't had that kind of information.

MS. JULIE BOSWORTH: (Fortis Benefits Insurance Company) You talked a lot about cross sell and up sell and how you enhance value going forward, but you mentioned briefly at the beginning about putting customers into different segments and servicing them differently by those segments. I would think that would be a little bit of a different modeling exercise than what you talked about here. Could you expand on any experience that you've had with that? In particular, I think credibility would be an issue. I think you would have to give more to finite customers rather than segments.

MR. SHUMRAK: There is not much practical experience with that. I think I've heard about efforts to start to do this. Most of these efforts are in the pilot stage of development.

For example, with respect to providing various levels of service to your agents, you can take some actions and they start to stay with you, or sell more for you, or give you more of their business. In fact, we didn't talk about this much, but the corollary to customer valuing for an agent would be, unless they're truly captive, how much of their business are they not giving to you, and what does it take to get more of their business? With certain annuity riders, one of their big successes is their process of interfacing with distributors that come from different sources. Even though they still have to have a reasonably good product in terms of product design and the funds underlying, it's that they make it so delightful to do business that for a few more points commission, or a few funds that aren't there, they just keep placing business with that company.

I think the way to do it would have to be the hypothesis pilot, where you would say, "Instead of reengineering so that we delight everybody and assume that everybody appreciates it and you get economic value, let's assume that's not the case and let's take enough of a subset of our agent producers or end buyers, if we're able to pull them for that kind of service, and run an experiment and track it for an adequate sample."

But once you started to get some data in the context of the exercise I just described, then you would have your segments sorted by service preference. Obviously, that would get interesting because you'd have to decide whether you wanted to re-price your product for the higher service cost for the people that value it. The question is, would you change and have different products for different segments, or would there be other ways in terms of levers that you have at your disposal behind the scenes product-wise that you could do?

In an ideal world you wouldn't focus the servicing intensity on those that didn't care for it. That would best because you wouldn't change your product. What would happen is that, if most of your producers wanted the high service but some segment didn't, and you started to identify those people, you could just pull the service away from those people. That's probably less practical, at least for now.

MR. TURNER: I have one quick point on that. I guess two examples; one non-financial service related, would be the way airlines treat the different level of passengers. It's not always that they say this person wants or doesn't want Cadillac service, but can they afford to give them certain levels of service.

One that we see a lot is in bank insurance where the customer is not only an insurance customer, he or she also has banking products, credit card products, etc. You can certainly segment your customers at a banking level based on income or deposit levels in the bank in terms of what services you provide to them. I've seen

it more from the perspective of "we can't afford to give everyone the very best service, so you have to segment your clients on some basis and decide who gets it and who doesn't."

MR. JACK TAYLOR: (Prudential Operations, the Philippines) Your thoughts about the direct marketing and other marketing of the segmentation of our customers are interesting to those of us who have been brought up in a life insurance environment with a regulatory environment that says "that's illegal"; making it very hard for us to accept. With the people we're developing and training, it would be very difficult for them to go to this type of thought process. It's almost foreign to our efforts. How to change that culture without losing the good aspects of what we have is a major challenge to us all.

Another issue involved cross selling and additions where Mike talked about cutting commissions. Most of our companies have career agency systems. We invest a tremendous amount of money in those career agents. If our cross selling, etc., actually increases the retention of those agents, we probably improve the bottom line of our companies by a tremendous amount because we don't have to go through the retraining efforts. I think that's another plus of CRM. It seems that it is almost going to require a complete change in the tools that we're using as actuaries to get to the point you described.

MR. TURNER: Right. I think it's important for us to remember that we can't always just think about the bottom line for the insurance company because if you stop with that, you might lose the picture of what it can do on your distribution side as well. Often times, although our margins may not be bigger, our market shares can be bigger if we're doing the right things for our sales forces.

Chart 1

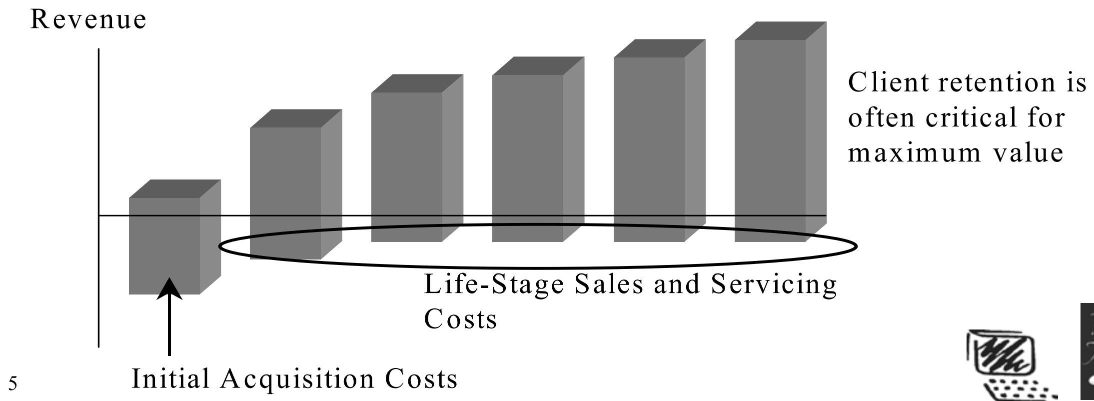
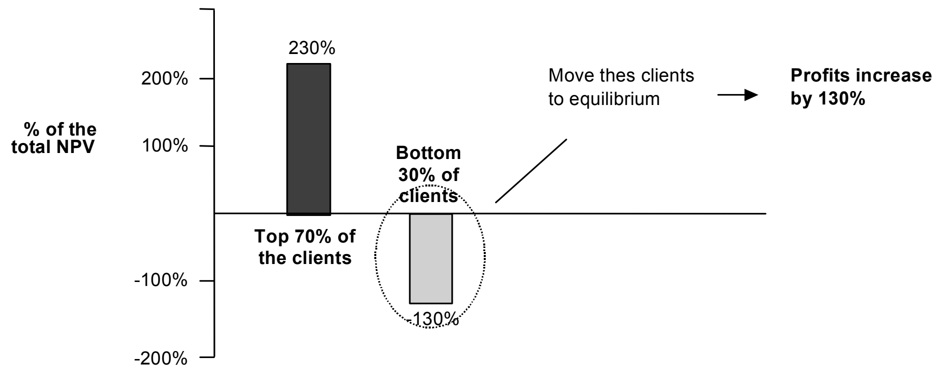


Chart 2

Why does CRM matter?

Benefits of CRM

- CRM can increase the average profitability of our customers and can increase market share



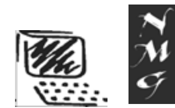


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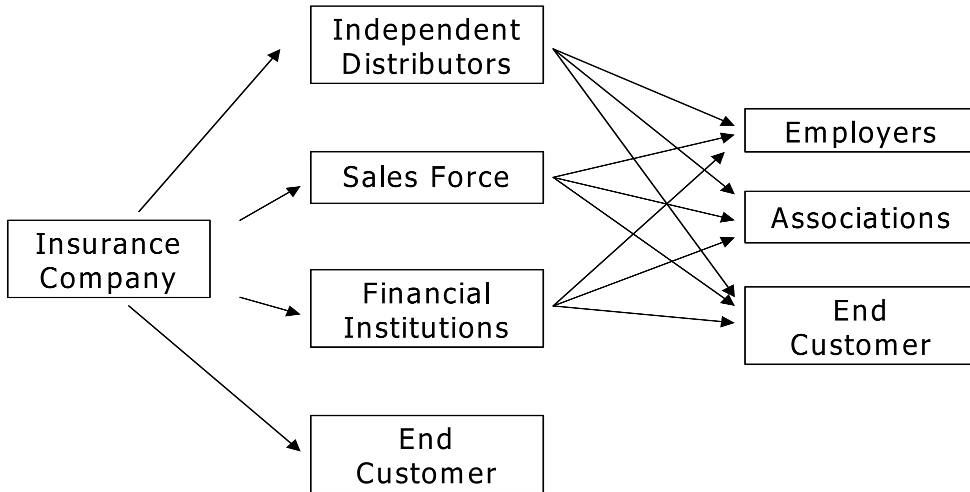
Chart 3



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