The Mismanagement of Customer Loyalty

by Werner Reinartz and V. Kumar

Much of the common wisdom about customer retention is bunk. To get strong returns on relationship programs, companies need a clearer understanding of the link between loyalty and profits.

The best customers, we're told, are loyal ones. They cost less to serve, they're usually willing to pay more than other customers, and they often act as word-of-mouth marketers for your company. Win loyalty, therefore, and profits will follow as night follows day. Certainly that's what CRM software vendors—and the armies of consultants who help install their systems—are claiming. And it seems that many business executives agree. Corporate expenditures on loyalty initiatives are booming: The top 16 retailers in Europe, for example, collectively spent more than $1 billion in 2000. Indeed, for the last ten years, the gospel of customer loyalty has been repeated so often and so loudly that it seems almost crazy to challenge it.

But that is precisely what some of the loyalty movement's early believers are starting to do. Take the case of one U.S. high-tech corporate service provider we studied. Back in 1997, this company set up an elaborate costing...
scheme to track the performance of its newly instituted loyalty programs. The scheme measured not only direct product costs for each customer but also all associated advertising, service, sales force, and organizational expenses. After running the scheme for five years, the company was able to determine the profitability of each of its accounts over time. Executives were curious to see just what payoff they were getting from their $2 million annual investment in customer loyalty.

The answer took them by surprise. About half of those customers who made regular purchases for at least two years—and were therefore designated as "loyal"—barely generated a profit. Conversely, about half of the most profitable customers were blow-ins, buying a great deal of high-margin products in a short time before completely disappearing.

Our research findings echo that company's experience. We've been studying the dynamics of customer loyalty using four companies' customer databases. In addition to the high-tech corporate service provider, we studied a large U.S. mail-order company, a French retail food business, and a German direct brokerage house. Collectively, the data have enabled us to compare the behavior, revenue, and profitability of more than 16,000 individual and corporate customers over a four-year period.

What we've found is that the relationship between loyalty and profitability is much weaker—and subtler—than the proponents of loyalty programs claim. Specifically, we discovered little or no evidence to suggest that customers who purchase steadily from a company over time are necessarily cheaper to serve, less price sensitive, or particularly effective at bringing in new business.

Indeed, in light of our findings, many companies will need to reevaluate the way they manage customer loyalty programs. Instead of focusing on loyalty alone, companies will have to find ways to measure the relationship between
loyalty and profitability so that they can better identify which customers to focus on and which to ignore. Here we present one way to do that—a new methodology that will enable managers to determine far more precisely than most existing approaches do just when to let go of a given customer and so dramatically improve the returns on their investments in loyalty. We'll also discuss strategies for managing relationships with customers who have different profitability and loyalty profiles. Let's begin, though, by reconsidering the evidence for the link between loyalty and profitability.

Is Loyalty Profitable?

To answer this question, we looked at the relationship between customer longevity and companies’ profits. We expected to find a positive correlation, so our real question was how strong would it be. A perfect correlation (that is, 1) would mean that marketers could confidently predict exactly how much money there was to be made from retaining customers. The weaker the correlation (the closer it was to zero), the looser the association between profits and customer tenure.

The results were hardly a ringing endorsement of the loyalty mantra. The association was weak to moderate in all four companies we studied, with correlation coefficients of 0.45 for the grocery retailer, 0.30 for the corporate service provider, 0.29 for the direct brokerage firm, and just 0.20 for the mail-order company.

But did the weakness of the overall correlation between profitability and longevity conceal any truth in the specific claims about the benefits of loyal customers? To find out, we tested the three claims usually advanced by loyalty advocates, the ones we started with at the beginning of this article: that loyal customers cost less to serve, that they are willing to pay more for a given bundle of goods, and that they act as effective marketers for a company’s products. We tested each of these hypotheses for all four companies by looking at several cohorts of customers at each who had begun doing business at the same time, tracking the profitability of each member of each group. In this way, we saw how these customers’ purchasing patterns and the level of service the companies accorded them evolved over time.

Claim 1: It costs less to serve loyal customers. Many advocates of loyalty initiatives argue that loyal customers pay their way because the up-front costs of acquiring them are amortized over a large number of transactions. But, of course, that argument presupposes that the customers are profitable in those transactions. A more plausible argument for the link between loyalty and decreased costs can be built on the idea that loyal customers will be more familiar with a company’s transaction processes. Since they need less hand-holding, the company should find it cheaper to deal with them. Loyal—and therefore experienced—customers of software products, for example, should be able to resolve problems on-line without needing the direct intervention of a technical assistant.

Our analysis, however, offers no evidence to back that argument. It is certainly true that within any one company, the monthly cost of maintaining a relationship with an individual customer—not just for the actual transactions but also for communications through mailings, telephone, and so forth—varies enormously, sometimes by a factor of 10 or more. But in none of the four companies we tracked were long-standing customers consistently cheaper to manage than short-term customers. In fact, the only strong correlation between customer longevity and costs that we found—in the high-tech corporate service provider—suggested that loyal and presumably experienced customers were actually more expensive to serve.

That last finding isn’t without precedent. There’s a sizable body of academic research documenting the often poor profitability of long-standing customers in business-to-business industries. These customers, who almost invariably do business in high volumes, know their value to the company and often exploit it to get premium service or price discounts. Indeed, we discovered that in its efforts to please the regulars, the corporate service provider had developed customized Web sites for each of its top 250 clients. At the click of a button, these customers could obtain personalized service from dedicated sales and service teams. The maintenance of these teams, not to mention the Web sites, cost the company $10 million annually.

What surprised us more was the weakness of the correlation between customer loyalty and lower costs in the other three companies, where we had expected to find service costs falling over time. In the mail-order company, for example, it had seemed reasonable to assume that long-standing, experienced patrons might be happy to switch their purchases from the phone to the company’s Web site, a move that would significantly reduce communication costs. Yet the communication cost-to-sales ratio for this company’s long-standing clients is barely different from what it is for the newer ones; in both cases, it took a bit more than six cents (6.3 cents versus 6.5 cents, to be exact) spent on marketing communication to generate a dollar’s worth of sales. It turned out that customers who processed their own orders through a Web site expected lower prices, which offset any cost savings the company may have garnered by using a cheaper channel. The disparity between the cost-to-sales ratios for recent and longtime customers at the French grocery chain and the German brokerage firm was also smaller than...
we had expected. At these companies, too, customers expected something in return for their loyalty.

These findings suggest that, at the very least, the link between loyalty and lower costs is industry specific. No doubt there are industries in which the oldest customers are the cheapest to serve, but as we've shown there are also others in which they are more expensive to satisfy.

Claim 2: Loyal customers pay higher prices for the same bundle of goods. If loyalty doesn't necessarily lower costs, then perhaps it generates revenue. Many proponents of the loyalty movement argue that customers who stick to one company do so because the cost of switching to another supplier is too high. They will, therefore, be willing to pay higher prices up to a point to avoid making the switch.

This argument sounds reasonable, but the logical conclusion is less obviously so—namely, that if loyal customers are worth pursuing because they'll pay higher prices, then companies will charge them higher prices. This seemed to us to be highly implausible in most corporate contexts, where customers regularly guarantee greater frequency of purchase in return for lower prices. But we did think it could describe many consumer markets. Mail-order customers, for instance, might well pay a little more for using a catalog they could find their way around. Indeed, charging established customers more is the norm in some industries. Credit card companies routinely lure in customers with promises of low initial interest rates, only to raise them later.

As we had expected, the evidence from the corporate service provider did not support the claim: The long-term customers consistently paid lower prices than the newer customers did—between 5% and 7% lower, depending on the product category. What was surprising was that we found no evidence that such loyal customers paid higher prices in the consumer businesses. Indeed, we found that like corporate clients, consumers also expect, and get, some tangible benefits for their loyalty. At the mail-order company, for instance, it turned out that regular customers actually paid 9% less than recent customers in one category of products. At the French grocery chain, there was no significant difference in prices paid in any product category. In that case, any willingness on the part of loyal customers to pay higher shelf prices was probably canceled out by the discounts many got from using the loyalty cards they were entitled to. At the brokerage house, all customers were charged the same fee—a percentage of their trade volume—regardless of their history with the company.

In general, then, it seems that a loyal customer—whether corporate or consumer—is actually more price sensitive than an occasional one. A number of theories could explain this phenomenon. First, loyal customers generally are more knowledgeable about product offerings and can better assess their quality. That means they can develop solid reference prices and make better judgments about value than sporadic customers can. This was certainly in evidence at the mail-order company; loyal customers typically would choose cheaper product alternatives—a lower-priced blender, say—in the catalogs than would those who were less familiar with the company.

Perhaps more fundamental, though, is the fact that customers seem to strongly resent companies that try to profit from loyalty. Surveys consistently report that consumers believe loyal customers deserve lower prices. This may well explain why U.S. telecom companies, which routinely offer customers special deals initially only to raise prices later, all experience high rates of customer churn. Finally, it's just plain impossible these days to get away with price differentiation for any length of time. Remember how close Amazon came to destroying its brand when it attempted to charge different prices to different customers for the same DVDs.

Claim 3: Loyal customers market the company. The idea that the more frequent customers are also the strongest advocates for your company holds a great attraction for marketers. Word-of-mouth marketing is supremely effective, of course, and many companies justify their investments in loyalty programs by seeking profits not so much from the loyal customers as from the new customers the loyal ones bring in.

To test whether regular customers of the French grocery chain were actually more effective marketers than infrequent customers, we asked a sample of the company's customers two questions. First, to gauge the extent of passive word-of-mouth marketing, we inquired whether they named the company when asked to recommend a particular grocery retailer. Then, to measure the level of active word-of-mouth marketing, we asked whether they ever spontaneously told friends or family about positive experiences with the company. We then identified every customer's actual level of loyalty, as measured by his or her recorded purchase behavior (that is, how often, how much, and how many different sorts of items were purchased). Finally, we solicited their own subjective measure of loyalty, their "attitudinal loyalty," in a telephone survey, in which we asked them if they felt loyal to the company, how satisfied they were with it, and whether they had any interest in switching to another company.

Overall, the link between customer longevity and the propensity to market by word-of-mouth was not that strong. But when we looked at attitudinal and actual loyalty separately, the results were intriguing. Customers of the grocery chain who scored high on both loyalty
measures were 54% more likely to be active word-of-mouth marketers and 33% more likely to be passive word-of-mouth marketers than those who scored high on behavioral loyalty alone. The results from a survey of the corporate service provider's customers produced similar if less striking results: Customers who exhibited high levels of both behavioral and attitudinal loyalty were 44% more likely to be active marketers and 26% more likely to be passive word-of-mouth marketers.

Although it's perhaps not surprising that people who talk more positively about a company are also more likely to sell others on the company, our findings are important for loyalty managers because most measure loyalty purely on the basis of purchasing behavior and do not conduct attitudinal surveys like ours. But if managers are investing in a loyalty program for its supposed marketing benefits, then they are looking at a potentially misleading indicator. Customers may well buy all their groceries at the same supermarket out of inertia and convenience. To identify the true apostles, companies need to judge customers by more than just their actions.

**Knowing When to Lose a Customer**

Our empirical findings are clear-cut. The link between loyalty and profits is weaker than expected, and none of the usual justifications for investing in loyalty stands up well to examination. But that doesn't mean we believe investments in loyalty are doomed. In our opinion, the reason the link between loyalty and profits is weak has a lot to do with the crudeness of the methods most companies currently use to decide whether or not to maintain their customer relationships.

The most common way to sort customers is to score them according to how often they make purchases and how much they spend. Many tools do that; one of the most familiar is called RFM (which stands for recency, frequency, and monetary value). Mail-order companies in particular, including the one in our study, rely on this tool to assess whether a customer relationship merits further investment.

To understand how RFM and methods like it work, let's imagine for the sake of simplicity that a company focuses on just two dimensions, recency and frequency of purchase. This company measures recency by finding out from its database if the customer bought something in the last past patterns are taken from the empirical data our four companies have collected in their customer databases.
The Mismanagement of Customer Loyalty

There are more and less complex ways to use the event-history model to compute the probability that a customer will keep on purchasing. But in its simplest form, the formula is \( t^n \), where, for Smith in our example, \( n \) is the number of purchases he made in the entire time period (in this case, the whole year), and \( t \) is the fraction of the period represented by the time between his first purchase and his last one.

Let's use the formula to assess the probabilities that Smith and Jones will each remain active, that is, keep on making purchases. Smith has made four purchases, the last being in month eight, so \( n \) is 4 and \( t \) is \( 8/12 \) or 0.6667. That makes Smith's probability of still being active \((0.6667)^4\), or 0.198. In other words, there's about a 20% probability that Smith will keep on purchasing. Jones also made her last purchase in month eight, so her \( t \) is 0.6667 as well, but she bought only twice, so her probability is \((0.6667)^2\), or 0.444, nearly 45%. Jones, therefore, is more than twice as likely as Smith to remain an active customer. Unlike RFM, this approach is particularly good at predicting how quickly a customer's purchasing activity will drop off, as the probability of their being active in the future drops steeply with time, so it clearly has the potential to prevent heavy overinvestment in profitable but disloyal customers.

In practice, of course, our calculations are much more sophisticated than the foregoing example and can take into account any number of variables, including demographics, amount of spending, and type of products purchased. Given enough historical data, we can estimate the probability of another purchase out into several future time periods. But no matter how complex the software a company uses to do the math, the analysis is very easy to implement, since all such probability models depend on just three simple pieces of information that any customer database stores: When did the customer buy for the first time? When did she purchase last? and When did she purchase in between?

The second main drawback of scoring methods like RFM is that the monetary-value component is almost always based on revenue rather than profitability. For example, the mail-order company classifies the revenue generated from a customer into the following four categories: $50 or less, $51 to $150, $151 to $300, and more than $300. But the decision to continue investing in customer relationships needs to be based on customers' profitability, not the revenue they generate. The cost of servicing customers who buy only small quantities of low-margin products may exceed the revenue they bring in. That profile turned out to fit fully 29% of the mail-order company's customers.

Instead of looking at revenue, therefore, we will need to incorporate profitability into our probability calculation. Specifically, we need an estimate of the average profit earned on each customer in any typical purchase period. For Smith and Jones, that's the average monthly profit figure, but the choice of the time period is generally driven by an industry's natural purchase cycle. In the mail-order

The Cost of Keeping Customers On

Just because a group of customers was profitable in the past, doesn't mean it will continue to be so in the future. Many nonloyal customers can be very profitable initially, causing companies to chase after them in vain for future profits. Such is the case illustrated in this graph, which tracks the profitability of that segment of one company's customers. Once these customers ceased their buying activity, they became unprofitable because the company kept investing in marketing to them.
business, marketers think in terms of months or quarters. In retailing, the period is a week.

An estimate of per-period profitability is not hard to obtain, especially in today's information-rich age. Our corporate high-tech service provider, for example, was easily able to calculate the historical profitability of each of its customers from its sales data, and we have been able to calculate the profitability of individual customers for the other companies we studied as well. To estimate a customer's future profitability, you simply multiply his average periodic profit figure by the number we previously calculated, the probability that the customer will still be active at the end of that period.

To see how this works, consider how a simple version of our approach could help the high-tech corporate service provider decide whether and how to invest in two ongoing customer relationships during the next year. From its sales data, the provider determines that the first account, Adam Incorporated, yielded an average profit of $5,500 per quarter over the last two years, while the second account, Eve Limited, yielded an average profit of $1,100. Using the formula, we estimate the probability that Adam Incorporated will remain active is 85% in the first quarter, 60% in the second, 35% in the third, and only 22% in the fourth. Probabilities for Eve Limited are only slightly lower, starting at 80% in the first quarter and declining to 50%, 27%, and 15% in the subsequent quarters. For each account, we now multiply the probability figure for each period by the historical average profit number, and the sum of those calculations gives us the estimated profit in dollars for each customer over the next year.

Both accounts are clearly profitable: Adam Incorporated is likely to generate $11,110, while Eve Limited will likely produce $1,720. But how much should the company invest in maintaining each relationship so that it will actually deliver the numbers? Given that a visit by the full sales team costs our company $5,000 and a single salesperson's visit costs $2,000, it's clear that Adam Incorporated merits the full treatment. Eve Limited, however, doesn't deserve even a single visit. If the account stays active, that's obviously good news, but it's not worth our company's time to chase the sale. Even loyal and profitable customers don't always deserve to be courted.

When tested on real customer databases, our approach produced a nuanced picture of the relationship between profitability and loyalty. About 40% of the service provider's profitable customers turned out to be not worth chasing, being unlikely to buy anything in the future, and almost the same percentage of the loyal ones were unprofitable. Fully 30% turned out to be neither profitable nor loyal. (See our results for all four companies in the chart "Which Customers Are Really Profitable?").
As valuable as segmentation is, even more valuable is correct identification at the individual level. Knowing that 60% of your loyal customers are profitable is useless if you don’t know which ones to court with what level of service. At the corporate service provider, for example, we were able to predict how profitable and how loyal any particular customer would be with 30% more accuracy than we obtained using traditional methods like RFM. That kind of misinformation carries a high price. Our mail-order company, for instance, was sending mailings to people it should have ignored, ignoring people it should have been cultivating, and sending the wrong material to people.

**From Measurement to Management**

So what is the next step? After analyzing your customers’ profitability and the projected duration of their relationships, you can place each of them into one of four categories, as shown in the matrix “Choosing a Loyalty Strategy.” Now, what kind of relationship management strategies should you apply to the different segments? For the customers who have no loyalty and bring in no profits—we call them “strangers”—the answer is simple: Identify early and don’t invest anything. But for customers in the other three quadrants, the choice of strategy will make a material difference to the segment’s profitability.

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### Choosing a Loyalty Strategy

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<tr>
<th>butterflies</th>
<th>true friends</th>
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<tbody>
<tr>
<td>high profitability</td>
<td>high profitability</td>
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<tr>
<td>good fit between company’s offerings and customers’ needs</td>
<td>good fit between company’s offerings and customers’ needs</td>
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<td>high profit potential</td>
<td>highest profit potential</td>
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<tr>
<td>actions:</td>
<td>actions:</td>
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<tr>
<td>aim to achieve transactional satisfaction, not attitudinal loyalty</td>
<td>communicate consistently but not too often</td>
</tr>
<tr>
<td>milk the accounts only as long as they are active</td>
<td>build both attitudinal and behavioral loyalty</td>
</tr>
<tr>
<td>key challenge is to cease investing soon enough</td>
<td>delight these customers to nurture, defend, and retain them</td>
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<table>
<thead>
<tr>
<th>strangers</th>
<th>barnacles</th>
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<tbody>
<tr>
<td>low profitability</td>
<td>low profitability</td>
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<tr>
<td>little fit between company’s offerings and customers’ needs</td>
<td>limited fit between company’s offerings and customers’ needs</td>
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<tr>
<td>lowest profit potential</td>
<td>low profit potential</td>
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<tr>
<td>actions:</td>
<td>actions:</td>
</tr>
<tr>
<td>make no investment in these relationships</td>
<td>measure both the size and share of wallet</td>
</tr>
<tr>
<td>make profit on every transaction</td>
<td>if share of wallet is low, focus on up- and cross-selling</td>
</tr>
<tr>
<td></td>
<td>if size of wallet is small, impose strict cost controls</td>
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We’ve found that the challenge in managing customers who are profitable but disloyal—the “butterflies”—is to milk them for as much as you can for the short time they are buying from you. A softly-softly approach is more appropriate for profitable customers who are likely to be loyal—your “true friends.” As for highly loyal but not very profitable customers—the “barnacles”—the emphasis has to be on finding out whether they have the potential to spend more than they currently do.

**Turning True Friends into True Believers.** Profitable, loyal customers are usually satisfied with existing arrangements. At the mail-order company, for instance, we found that they tended to return goods at a relatively high rate, reflecting their comfort in engaging with the company’s processes. They are also steady purchasers, buying regularly, but not intensively, over time.

In managing these true friends, the greatest trap is overkill. At the catalog company, for instance, we found that intensifying the level of contact through, for example, increased mailings, was more likely to put off loyal and profitable customers than to increase sales. People flooded with mail may throw everything out without looking at it. Sent less mail, however, they are more likely to look at what they get. Indeed, the mail-order company found that its profitable, loyal customers were not among those who received the most mailings.
What's more, companies need to concentrate on finding ways to bring to the fore their true friends' feelings of loyalty, because "true believers" are the most valuable customers of all. At the grocery retailer, for example, we found that customers who scored high on both actual and attitudinal measures of loyalty generated 120% more profit than those whose loyalty was observed through transactions alone. It wasn't just a business-to-consumer phenomenon, either: Those of the corporate service provider's customers who exhibited loyalty in both thought and deed were 50% more profitable than those who expressed their loyalty through action alone.

Companies can do several things to make loyal customers feel rewarded for their loyalty. The French grocery chain lets loyal customers opt in to e-mailings of special recipes, price promotions, and the like. It also grants them preferred access to company-sponsored seasonal events. For instance, they get exclusive early access to semiannual, weekend wine festivals in which they get to buy many of the better wines, which are available only in limited quantities. Such measures are already having an appreciable impact on the purchasing volumes and profitability of loyal customers.

**Enjoying Butterflies.** The next most valuable group comprises customers who are profitable but transient, and some industries are full of these kinds of purchasers. For instance, many of the direct brokerage company's most valuable customers were what it called "movers," investors who trade shares often and in large amounts. Aware of their value as customers, these people enjoy hunting out the best deals, and they avoid building a stable relationship with any single provider.

The classic mistake made in managing these accounts is continuing to invest in them after their activity drops off. Any such efforts are almost invariably wasted; our research shows that attempts to convert butterflies into loyal customers are seldom successful – the conversion rate was 10% or lower for each of the four companies we studied. Instead of treating butterflies as potential true believers, therefore, managers should look for ways to enjoy them while they can and find the right moment to cease investing in them. In practice, this usually means a short-term hard sell through promotions and mailing blitzes that include special offers on other products, an approach that might well irritate loyal customers. The corporate service provider, for instance, telephones those it has identified as butterflies four or five times shortly after their most recent purchase and follows up with just one direct mailing six to 12 months later, depending on the product category. If these communications bear no fruit, the company drops contact altogether.

**Smoothing Barnacles.** These customers are the most problematic. They do not generate satisfactory returns on investments made in account maintenance and marketing because the size and volume of their transactions are too low. Like barnacles on the hull of a cargo ship, they only create additional drag. Properly managed, though, they can sometimes become profitable.

The first step is to determine whether the problem is a small wallet (the customers aren't valuable to begin with and are not worth chasing) or a small share of the wallet (they could spend more and should be chased). Thanks to modern information technology, which makes it possible to record the spending patterns of individuals, this is much less of a challenge than it once was. Our French grocery chain, in fact, does it rather well. By looking closely at POS data on the type and amount of products that individuals purchase (say, baby or pet food), the company derives amazingly reliable estimates of the size and share of the individual customers' wallets it has already captured in each product category. Then, a company can easily distinguish which loyal customers are potentially profitable and offer them products associated with those already purchased, as well as certain other items in seemingly unrelated categories. For instance, our corporate service provider might sell add-on software or memory upgrades for previously sold systems. Our mail-order company might send a do-it-yourself catalog to a customer who had previously bought a kitchen appliance.

There is no one right way to make loyalty profitable. Different approaches will be more suitable to different businesses, depending on the profiles of their customers and the complexity of their distribution channels. But whatever the context, we believe that no company should ever take for granted the idea that managing customers for loyalty is the same as managing them for profits.

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1. A complete explanation of the actual model we use can be found in our article, "On the Profitability of Long-Life Customers in a Noncontractual Setting: An Empirical Investigation and Implications for Marketing" *Journal of Marketing* (October 2000).

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