Net Promoter Score Fails the Test

Market research buyers beware.

By Byron Sharp

Beginning in this issue, Byron Sharp, director of Ehrenberg-Bass Institute, University of South Australia, will be writing a column dealing with issues in marketing research. In this issue, he tackles the Net Promoter Score.

"Managers have adopted the Net Promoter Score on the basis that solid science underpins the technique and that it is superior to other metrics ...We find no support for the claim that Net Promoter is the 'single most reliable indicator of a company's ability to grow.'"

The quote listed above is from Tim Keiningham et al.'s 2007 *Journal of Marketing* article and winner of the Marketing Science Institute /H.Paul Root Award.

The Net Promoter Score was developed by Frederick Reichheld, a consultant who is getting a bit of a reputation for headline-grabbing conclusions that aren't backed by even his own empirical evidence. Prior to the Net Promoter Score, Reichheld was made famous by a *Harvard Business Review* article that delivered the following extraordinary quote: "Companies can boost profits by almost 100 percent by retaining just 5 percent more of their customers."

Unfortunately, the 5 percent more retention actually refers to 5 percentage points less defection. That is, a reduction from 10 percent annual defection to 5 percent—a truly massive halving of customer defection. Given that much customer defection is beyond management control, due to things like consumers leaving the category, leaving town or even dying, halving defection doesn't sound easy. And a 100% gain in profits sounds unrealistic. This begs the question: How did Reichheld and his colleagues arrive at this fanciful conclusion, and what empirical data led them? The answer is none! They merely did a thought experiment, and it goes like this:

Suppose a credit card company lost 10 percent of its customers each year. Then the average customer life would be 10 years. Now if that firm were able to reduce annual customer defection to 5 percent, then the average customer tenure would double to 20 years. A customer delivers some profits each year so, now that they stay for more years, they must, in total, give more.

So it is an analytical tautological "finding," not an empirical discovery based on observing the results of companies' retention efforts. It's similar to saying that, if you win the lottery, then you'll be richer—true by definition but hardly a discovery.

Reichheld and Sasser simply argued by (fantastic) logic and then presented their logic in a very misleading manner. Their quote is misleading for the following reasons:

1. Their 5 percent drop in defection is actually a drop of 5 percentage points (i.e., from 10 percent to 5 percent), which is a 50 percent decrease, a halving of customer defection.

2. Their thought experiment wasn't about company profitability; it was about customer profitability, which is quite a different thing. Essentially all they "revealed" is that, if a customer stays (buys) for longer, then they give you more money over this longer period. This is simple addition: We know that 20 years is more than 10. (By the way, this is not hidden in the *Harvard Business Review* article. While it is fair to accuse Reichheld and Sasser of misleading language, they do clearly show how they reached their fantastic conclusion. So it is scary to think how many intelligent managers, academics and journalists were fooled by this article; presumably few read the whole article.)

3. They make an unstated assumption that the halving of defection is achieved at zero cost.

4. They assume that halving customer defection in the real world is perfectly possible and even easy. Indeed their article was titled "Zero defections...." But can companies radically alter their rate of customer defection? Is it possible to reduce them to zero or to even halve defections? Empirical evidence shows that this is merely wishful and unbusinesslike daydreaming.

The Double Jeopardy Law

We have all heard that old maxim that it costs five times as much to win a new customer as it does to stop one from leaving. There is no empirical support for this statement. In reality, delivering permanent large reductions in defection rates looks very difficult, and that means expensive because defection rates (another loyalty measure) also follow the

double jeopardy law. This means your defection rate is essentially a function of your market share, and the category you are in, and that this defection level doesn't vary a lot between competing brands.

Just how many customers a brand will lose in a year depends a lot on how many it has to lose in the first place. Obviously you can't lose a million customers if you don't have a million customers to start with. Larger brands therefore can, and do, lose more customers each year. They also gain more

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customers. But as a proportion of their customer base they lose (and gain) less than smaller brands (i.e., their defection percent is lower).

Imagine a two-brand market. One brand is the smaller with 20 percent market share (say a customer base of 200 customers) while the other is larger with 80 percent share (a customer base of 800 customers). With the two brands each maintaining their respective share of customers, then each brand's defections must be equaled by their acquisitions. Imagine that the large brand loses (and gains) 100 customers each year. Then, in this two-brand market, the small brand too must lose and gain 100 customers. (See Exhibit 1.) The small brand's defection level is 50 percent (200 divided 100) while the larger brand's defection level is only 12.5 percent (800 divided by 100).

In real markets there are more than two brands, so things potentially get much more complicated. But the fundamental pattern, the double jeopardy law, still holds with larger share brands having slightly lower defection levels (higher loyalty).

The double jeopardy law is a serious blow to Reichheld and Sasser's idea of easily and cheaply halving the amount of customer defection. Double jeopardy shows that it isn't possible to radically alter defection rates without massively shifting market share.

Exhibit 2 shows defection rates for car brands in the United States. It comes from a survey of 10,000 American new car buyers across the years 1989-1991 that recorded what car brand they bought and what brand they owned previously (if any). Defection levels here are much higher than in most service industries, though still surprisingly low when one considers the many dozens of other new car brands that each buyer could have bought rather than staying loyal.

Each major car brand suffers a defection rate of about 60 percent to 70 percent, or two-thirds. No brand has managed to gain a defection rate much different from this average, and certainly not without having larger market share.

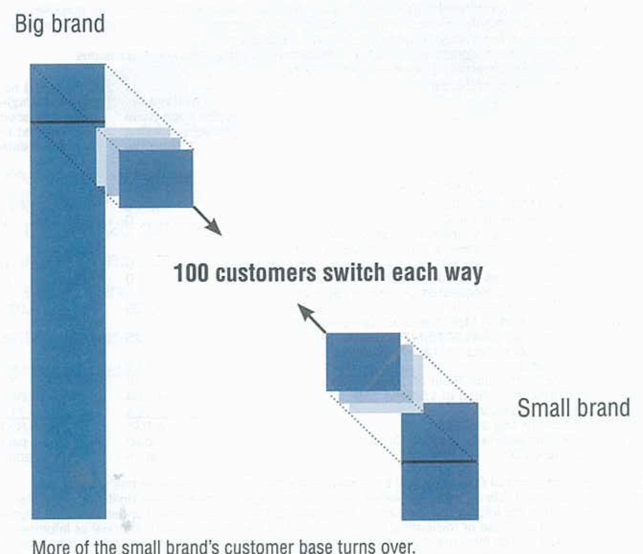
Reichheld's famous quote about loyalty and profits is clearly nonsense, and rather shockingly misleading.

Epiphany

But then in 2004 Reichheld is said to have had an epiphany describing his previous work on loyalty as "powerful but useless." Keeping customers didn't matter so much; having customers who would recommend you is everything.

So the latest myth he peddles is that asking customers their likelihood of recommending the company predicts company growth. He claims it does so much better than traditional metrics such as customer satisfaction.

Exhibit 1 Defections rates and brand size



More of the small brand's customer base turns over.

Exhibit 2 Automobile customer defection levels

U.S. automobile brand	Market penetration (percent)	Defection rate (percent)
Pontiac	9	58
Dodge	8	58
Chevrolet	8	71
Buick	7	59
Ford	6	71
Toyota	6	70
Oldsmobile	5	66
Mercury	5	72
Honda	4	71
Average defection rate		**67**

Actually, if you read Reichheld's *Harvard Business Review* article carefully, you can see he employs the same sort of sleight of hand he did in his customer defection work. Pay careful attention to the dates. Reichheld writes that, starting in the first quarter of 2001, consultancy firm Satmetrix began collecting customer likelihood-to-recommend responses via e-mail survey. Each quarter collected 10,000 to 15,000 responses, gradually building a small data set covering 400 companies in a dozen industries. Reichheld then calculated a Net Promoter score for each company and compared this to the company's growth rate over the three years 1999 to 2002. Yes, that's the previous three years.

Yes, so the correlation he reports says that firms with higher Net Promoter scores were previously growing – this is backwards prediction.

Reichheld admits on his Web site that the statistical analysis in his book was sloppy, but claims that the consultancy company he worked for has done more extensive subsequent analysis showing no correlations between satisfaction scores and company growth, but excellent correlation for the NPS. However, Keiningham et al's *Journal of Marketing* article perfectly repeated Reichheld's own analysis and found the same or better correlation between satisfaction and growth (hence the quote at the start of this article).

Now such correlations say little about causality, which Reichheld tries to use in his defense, but then why on earth did he select these cases to "prove" his case? He even admitted he'd selected among the best examples! Hardly convincing evidence.

In sum, this is snake oil, fake science. The lesson for market researchers and insight directors is just how easy it is to make compelling slogans from incorrect findings. It's scary how many CEOs fell for Reichheld's fallacies, presumably because they were published in *Harvard Business Review* and presumably because hardly anyone actually read critically the full articles. Market research buyers beware! ●

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Additional Reading

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