



# The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet

Customer  
satisfaction and  
loyalty

361

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## Abstract

**Purpose** – The purpose of this research is to examine different customer satisfaction and loyalty metrics and test their relationship to customer retention, recommendation and share of wallet using micro (customer) level data.

**Design/methodology/approach** – The data for this study come from a two-year longitudinal Internet panel of over 8,000 US customers of firms in one of three industries (retail banking, mass-merchant retail, and Internet service providers (ISPs)). Correlation analysis, CHAID, and three types of regression analyses (best-subsets, ordinal logistic, and latent class ordinal logistic regression) were used to test the hypotheses.

**Findings** – Contrary to Reichheld's assertions, the results indicate that recommend intention alone will not suffice as a single predictor of customers' future loyalty behavior. Use of a multiple indicator instead of a single predictor model performs better in predicting customer recommendations and retention.

**Research limitations/implications** – The limitation of the paper is that it uses data from only three industries.

**Practical implications** – The presumption of managers when looking at recommend intention as the primary, even sole gauge of customer loyalty appears to be erroneous. The consequence is potential misallocations of resources due to myopic focus on customers' recommend intentions.

**Originality/value** – This is the first scientific study that examines recommend intentions and its impact on retention and recommendation on the micro (customer) level.

**Keywords** Customer retention, Customer loyalty, Customer satisfaction

**Paper type** Research paper



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## Introduction

Enhancing customer loyalty has become a popular topic for managers, consultants, and academics. The arguments in support of loyalty are simple to understand. Loyal customers are reported to have higher customer retention rates, commit a higher share of their category spending to the firm, and are more likely to recommend others to become customers of the firm (Reichheld and Earl Sasser, 1990; Zeithaml, 2000).

To monitor their performance and guide improvement efforts with regard to customer loyalty, managers frequently rely on customer feedback systems. This feedback typically is obtained through customer surveys that contain measures of satisfaction, repurchase intention, and word-of-mouth intention (Morgan and Rego, 2006). The inherent belief among managers is that these measures serve as leading indicators of customers' future firm-related behaviors (e.g., retention, share-of-wallet allocation, and word-of-mouth).

Research has examined most of these commonly used customer satisfaction/loyalty metrics and subsequent customer behaviors. These examinations however have tended to focus on bivariate relationships such as repurchase intention and repurchase behavior (Chandon *et al.*, 2005; Morwitz *et al.*, 1997), customer satisfaction and share-of-wallet (Keiningham *et al.*, 2003), complaint intention and complaining behavior (Oh, 2006).

Additionally, there is no consensus as to the best means of gauging customer loyalty (Uncles *et al.*, 2003). Since the goal of managers is to enhance different customer loyalty outcomes simultaneously (e.g., retention, share-of-wallet, customer referrals), however, there is a desire among managers to find the optimum gauge of customer loyalty that will result in favorable outcomes on multiple behavioral criteria.

Noted loyalty consultant, Frederick Reichheld, argues that of all commonly used loyalty metrics, recommend intention is by far the best at predicting customers' actual loyalty behavior (purchase and recommendations) (Reichheld, 2003). Reichheld bases this assertion on research conducted in partnership with Satmetrix Systems and Bain & Company (Reichheld, 2003; Satmetrix, 2004). In particular, Reichheld (2003, p. 50) states, "The data allowed us to determine which survey questions had the strongest statistical correlation with repeat purchases or referrals . . . One question was best for *most* industries. 'How likely is it that you would recommend [company X] to a colleague or friend?' ranked first or second in 11 of the 14 cases studied. . . Interestingly, creating a weighted index – based on the responses to multiple questions and taking into account the relative effectiveness of those questions – provided insignificant predictive advantage"[1]. This research served as the micro-level (customer-level) analysis from which the Net Promoter loyalty metric was ultimately created[2].

Thus far, however, there have been no peer-reviewed, scientific investigations examining the relationship between recommend intention and customer behaviors (outside of customer referral/complaining behavior). This research seeks to examine the relationship between responses to commonly used satisfaction and loyalty survey questions, including recommend intention, and their relationship to future customer behavior: purchasing (retention and share-of-spending), and recommendations.

The data for this study comes from a longitudinal study of over 8,000 customers of firms in one of three industries (retail banking, mass-merchant retail, and Internet service providers (ISPs)). Customer ratings of common satisfaction and loyalty metrics

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were monitored over two years; in the second year of the study, customers' purchasing (retention and share-of-category spending) and referral behaviors were also tracked.

### Customer metrics

#### *Customer satisfaction*

By far, the most commonly used customer perceptual metric by managers is satisfaction (Gupta and Zeithaml, 2007). Zeithaml *et al.*, 2006 (p. 170) observe that this is "because it is generic and can be universally gauged for all products and services (including nonprofit and public services)[3]. Even without a precise definition of the term, customer satisfaction is clearly understood by respondents, and its meaning is easy to communicate to managers." With regard to satisfaction's relationship to customer behavior, research has shown a link between satisfaction and customer retention (Anderson and Sullivan, 1993; Bolton, 1998; Jones and Earl Sasser, 1995; LaBarbera and Mazursky, 1983; Loveman, 1998; Mittal and Kamakura, 2001; Newman and Werbel, 1973; Rust and Zahorik, 1993; Sambandam and Lord, 1995) and customers' share of category spending (i.e. share-of-wallet) (Keiningham *et al.*, 2005; Keiningham *et al.*, 2003; Perkins-Munn *et al.*, 2005).

#### *Customer expectations*

Customer satisfaction is strongly influenced by customer expectations. The gap between perceived quality and expected quality, called "expectancy disconfirmation" is a strong predictor of customer satisfaction (Oliver, 1980; Rust *et al.*, 1995). As a result, many managers and researchers have chosen to explicitly measure the extent to which a product/service meets customers' expectations.

The seminal SERVQUAL framework of Parasuraman *et al.*, 1988; Parasuraman *et al.*, 1991, 1993; Zeithaml *et al.*, 1996) conceptualized and operationalized service quality as the gap between customers' expectations and perceptions (Parasuraman *et al.*, 1985; 1994). Zeithaml *et al.* (1996) propose a methodology for linking service quality measures to financial outcomes: in particular, service quality to repurchase intention to retention to firm financial outcomes.

Additionally, the American Customer Satisfaction Index (ACSI) measures customer expectations as a component of its satisfaction index (Merz, 2005).

#### *Customer value (worth what paid for)*

According to Zeithaml (1988), "perceived value is the customer's overall assessment of the utility of a product based on perceptions of what is received and what is given". Consumers' perceptions of value are influenced by differences in monetary costs, non-monetary costs, customers' tastes, and customers' characteristics (Bolton and Drew, 1991).

Consultant Bradley Gale popularized the use of a technique called Customer Value Analysis (CVA) (Gale, 1994). The relative performance of companies on a "perceived value" metric used in CVA was linked to firms' relative market share (Clark *et al.*, 1999). As a result, many managers adopted the CVA approach.

The value metric was typically defined as customers' responses to a "worth what paid for" question (Bowden, 1998; Clark *et al.*, 1999; Varki and Colgate, 2001). Specifically, Gale (1994, p. 80) recommends a value question similar to the following,

“Considering the products and services that your vendor offers, are they worth what you paid for them?”

*Brand preference*

Marketers have long understood the importance of a brand's inclusion in a consumer's "evoked set" (the subset of brands that will be considered for purchase on any given occasion) to the ultimate success of the brand. As such, the degree to which consumers prefer specific brands relative to competing alternatives is an important component of customers' brand loyalty (Rundle-Thiele and Mackay, 2001). Additionally, brand preference has been shown to interact with customer satisfaction to impact customers behavioral loyalty (as measured by share-of-wallet) (Keiningham *et al.*, 2005).

In marketing literature, attitudinal loyalty is often described as preference for the brand (Bennett and Rundle-Thiele, 2002). Therefore, brand preference may in fact be regarded as a higher order construct in the sense that "preference" would likely be an outcome based upon customers' expectations or experience (i.e. satisfaction).

*Repurchase intention*

Researchers have long used repurchase intentions to help predict future purchasing behavior. While the correlation between intentions and repurchase is not perfect, a number of researchers have examined various factors influencing this relationship (Benmaor, 1995; Chandon *et al.*, 2005; Jamieson and Bass, 1989; Morrison, 1979; Morwitz *et al.*, 1993; Morwitz *et al.*, 1997).

*Recommend intention*

Word-of-mouth intention has been of importance to researchers for at least the past thirty years. Early research regarding word-of-mouth tended to focus on complaining behavior (for example, Gronhaug and Kvitastein, 1991; Singh, 1988). More recently, however, the focus has shifted to recommendations and customer advocacy (for example, Brown *et al.*, 2005; Christopher *et al.*, 1991; Jones and Earl Sasser, 1995).

Thus far, there is very little scientific research relating recommend intention to actual recommendations. In an analysis of actual conversations in numerous discussions forums on the Internet, Andreassen *et al.* (2006) documented recommendations as one of four unique dialogues taking place. As noted earlier, loyalty expert Fred Reichheld (2003) argues that recommend intention is the best metric at predicting not only customers' recommending behavior, but also their purchasing behavior.

*Customer retention*

In our investigation, customer retention is defined as customers' stated continuation of a business relationship with the firm. For Internet service providers (ISPs), it is continuing to use the same provider. For retail banks, it is continuing to maintain an account relationship with the bank. And for discount retailers, it is the continued repeat shopping with the retailer.

Much of the research regarding customer satisfaction and customers' actual behavior has focused on the relationship between satisfaction and retention. This emphasis is largely the result of early research, which identified customer retention as

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a key driver of firm profitability (Reichheld, 1993, 1996; Reichheld and Kenny, 1990; Reichheld *et al.*, 2000; Reichheld and Earl Sasser, 1990).

#### *Share-of-wallet*

For retail banking, share-of-wallet is defined as the stated percentage of total assets held at the bank being rated by the customer[4]. For discount retailers, it is the stated percentage of total purchases from discount retailers conducted at the retailer being rated by the customer. Because customers of ISPs overwhelmingly use only one service provider (outside of their work environment), share-of-wallet is not measured for this industry.

Researchers Jones and Earl Sasser (1995, p. 94) assert, “the ultimate measure of loyalty, of course, is share of purchases in the category” (i.e. share of wallet). While this is likely an overstatement, as share of wallet is not as forward looking as other measures of loyalty (Oliver, 1999), it is frequently used by researchers to operationalize loyalty behavior (for example, Bowman *et al.*, 2000; Bowman and Narayandas, 2004; Brody and Cunningham, 1968; Cunningham, 1956; Cunningham, 1961; Wind, 1970).

Managerially, a focus on improving customers’ share-of-wallet has been found to have greater financial impact than by focusing on customer retention. McKinsey & Company reports that efforts to improve customers’ share of spending and customer retention can add as much as ten-times greater value to a company than focusing on retention alone (Coyles and Gokey, 2002).

#### *Customer recommendations*

Arndt (1967, p. 190) in his seminal work defined word-of-mouth as “oral, person-to-person communication between a perceived non-commercial communicator and a receiver concerning a brand, a product, or a service offered for sale”. Two decades later Westbrook (1987, p. 261) defined word-of-mouth as: “informal communication directed at other consumers about the ownership, usage or characteristics of particular goods and services and/or their sellers”. For all industries investigated, customer recommendations represents whether or not the respondent actually recommended the firm or brand to another person.

#### *Trend in spending*

It is a well-known maxim in marketing that past customer behavior tends to be a relatively good predictor of future customer behavior (Sheeran *et al.*, 1999; Soderlund *et al.*, 2001). In fact, the widely used RFM (recency, frequency, monetary value) segmentation approach used by direct marketers is based upon this truth (Keiningham *et al.*, 2006; Miglautsch, 2002). To provide a gauge of past behavior, respondents to the bank and retail surveys were asked to report their recent trend in spending in the category with the specific firm under investigation.

### **Hypothesis development**

Most models of satisfaction and loyalty tend to view the relationship among metrics as being hierarchical (for example, Anderson and Mittal, 2000; Heskett *et al.*, 1994; Parasuraman *et al.*, 1988; Rust *et al.*, 1995). Simplistically, the hierarchy would be expected to flow as follows: customer perceptions to behavioral intentions to customer

behavior. This logic has a close resemblance to the theory of reasoned action (Ajzen and Fishbein, 1980) from attitude theory.

Consultants and business managers frequently ignore or misunderstand the hierarchical and differentiating characteristics of each link in the chain of effects from satisfaction to intentions to behavior. As a result, it is not uncommon to hear consultants and managers say that something to the effect that they have gone “beyond” customer satisfaction to measuring customer loyalty; For example, book titles such as *Customer Satisfaction Is Worthless: Customer Loyalty Is Priceless* (Gitomer, 1998) and *Beyond Customer Satisfaction to Customer Loyalty* (Bhote, 1996) reflect this common management perception.

Reichheld (2003) makes a similar argument in his research regarding the relationship between responses to various questions asked in a customer survey and customers’ subsequent loyalty-based behaviors. In particular, Reichheld argues that recommend intention performs better than many questions designed to assess customers’ perceptions of their experience, most notably singling out customer satisfaction measurement as inferior. Oliver (1999), however, finds that satisfaction is a necessary step in loyalty formation, and that for many firms is the only feasible goal to enhance loyalty for which they can strive. Reichheld’s (2003) position in effect argues that firms should manage customer intentions, as opposed to perceptions of their experience; in other words, manage an outcome (i.e. intentions) instead of a cause (i.e. customer experience).

While the logic of a hierarchical process is both commonsensical and theoretically supported, in the case of the findings presented by Reichheld (2003) regarding the superiority of recommend intention in linking to customers’ loyalty behaviors than other metrics, there are notable gaps in the current literature from which to accurately gauge the reasonableness of the findings. Therefore we offer five hypotheses, based upon the current literature, which address fundamental aspects of Reichheld’s (2003) findings.

#### *Hypotheses*

As noted earlier, customer perceptions, behavioral intentions, and customer behavior are widely believed to be hierarchical constructs. Since are hierarchical, the strength of the relationship between extremes in the continuum should be less than for adjacent constructs. In other words, in the chain of effects, variables that are closer to the outcome should have a stronger relationship compared to variables that are earlier in the chain. This would appear to be the case based upon Reichheld’s (2003) finding that a behavioral intention metric was more closely linked to customer behavior than measures of customers’ satisfaction with the product/service experience. Hence, we hypothesize:

- H1.* Intentions (repurchase and recommendation) will be more strongly correlated to customer behavior than customers’ perceptions of satisfaction, value, and expectations.

Reichheld (2003) and Satmetrix (2004) specifically measured two types of behavioral intentions: repurchase intention and recommend intention. A number of researchers have examined the relationship between repurchase intention and repurchase behavior (Bemmar, 1995; Chandon *et al.*, 2005; Jamieson and Bass, 1989; Morrison, 1979;

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Morwitz *et al.*, 1993; Morwitz *et al.*, 1997). A body of research similarly exists examining the relationship between word-of-mouth intention and word-of-mouth behavior (Brown *et al.*, 2005; Christopher *et al.*, 1991; Gronhaug and Kvitastein, 1991; Jones and Earl Sasser, 1995; Singh, 1988).

While seemingly obvious, it is important to point out that each intention metric is designed to predict a specific customer behavior (i.e. repurchase or recommendation). Reichheld (2003) argues, however, that recommend intention suffices as a predictor for both types of customer behavior.

Currently, Reichheld (2003) and Satmetrix (2004) provide the only research into this specific issue. Despite their findings, however, we believe that each intention metric is gauging a distinct customer behavior. Therefore, we hypothesize:

- H2.* Repurchase intention will be more strongly correlated to repurchase behavior than recommend intention, and customers' perceptions of satisfaction, value, and expectations.
- H3.* Recommend intention will be more strongly correlated to recommend behavior than repurchase intention, and customers' perceptions of satisfaction, value, and expectations.

Share-of-wallet is a topic of increasing importance among both managers and academics (Zeithaml, 2000). Researchers Jones and Earl Sasser (1995, p. 94) assert, "the ultimate measure of loyalty, of course, is share of purchases in the category" (i.e. share of wallet). Reichheld and Earl Sasser (1990) argue that "profit from increased purchases" (i.e. increased share of category spending/share of wallet) is a major contributor to profits through increased customer loyalty.

This would appear to be supported by empirical research. Coyles and Gokey (2002) find that efforts to improve customers' share of spending and customer retention can add as much as ten-times greater value to a company than focusing on retention alone. Therefore any metric designed to best gauge customer loyalty would need to assess its relationship to share of wallet.

Perkins-Munn *et al.* (2005) found a strong relationship between repurchase intentions and actual repurchase, and that retention and share-of-wallet, while not identical, are closely related and hence can at times be used as proxies for one another. Reichheld (2003), however, argues that recommend intention is the best metric for gauging customers' loyalty behaviors; therefore, based upon this assertion, recommend intention would be expected to more closely correlate to share of wallet.

Again, Reichheld (2003) and Satmetrix (2004) provide the only research into this specific issue (and it is unclear as to how they integrated share of wallet into their measure of customers' purchasing behaviors). Therefore, given the findings of Perkins-Munn *et al.* (2005), we hypothesize:

- H4.* Repurchase intention will be more strongly correlated to share-of-wallet than recommend intention, and customers' perceptions of satisfaction, value, and expectations, and customers' recommend intention.

Reichheld (2003, p. 50) states, "creating a weighted index – based on the responses to multiple questions and taking into account the relative effectiveness of those questions

– provided insignificant predictive advantage” when compared to the use of a single recommend intention question. This finding is highly unexpected. As we expect recommend intention to be more strongly correlated to recommend behavior, and repurchase intention to be more highly correlated to customers’ repurchasing behavior, it would appear more logical to expect that these two behavioral intention metrics would significantly contribute to a model designed to predict these customer behaviors.

Furthermore, researchers have shown that typically single item measures are less reliable than multi-item scales/constructs (Wanous and Hudy, 2001; Wanous and Reichers, 1996; Wanous *et al.*, 1997).

Therefore, we hypothesize that:

- H5.* A multivariate model will be significantly better at predicting both customers’ repurchase and recommend behaviors than a univariate model containing only recommend intention.

### The data

The data for this study comes from a longitudinal study of over 8,000 customers of firms in one of three industries (retail banking, mass-merchant retail, and Internet service providers (ISPs)). The panel is proprietary to a large market research provider, and is structured and maintained so that market researchers can obtain and survey USA consumers based upon their desired demographic profiles. The research firm provides incentives to members to continue participation in the panel. In the case of this research, respondents were screened based upon being active customers of one of the firms/brands under investigation.

Customers were surveyed regarding their experience with the brand/firm. A follow-up survey was conducted approximately one year after the initial survey. In addition to the questions surveyed in the initial study, customers’ stated purchasing (retention and share-of-category spending) and referral behavior were also tracked.

Survey researchers frequently use customer attitudinal and perceptual metrics to aid in predicting customers’ future behaviors. Our research examined several of the most common customer perception metrics (customer satisfaction, customer expectations, customer value (defined as “worth what paid for”), and brand preference) and two widely used behavioral intention metrics (repurchase intention and recommend intention). Table I presents the attitudinal questions used and their corresponding rating scales.

Additionally, our study examined customer behaviors associated with customer loyalty. As predictor variables, two stated behavior metrics were investigated (from the initial survey period): recent trend in spending within the industry and for the firm (see Table II). As dependent variables, four behaviors were investigated: change in share-of-wallet (i.e.  $SOW_t - SOW_{t-1}$ ), SOW, customer retention, and customer recommendations.

### Analysis

#### *Creation of recoded variables*

Reichheld (2003) and Satmetrix (2004) used Pearson correlations to test the strength of the relationship between various satisfaction/loyalty survey questions and subsequent customer behaviors (purchase and recommendations). Satmetrix (2004) reports:

*Taking into account your total experience, overall, how satisfied are you with (Company or Brand X)? (1-10 scale)*

- 10 Completely satisfied
- 1 Completely dissatisfied

*How well has (Company or Brand X) met your expectations? (1-10 scale)*

- 10 Completely failed to meet expectations
- 1 Greatly exceeded expectations

*Using a scale from 1 to 10 with 1 being Strongly Disagree and 10 being Strongly Agree please tell me how much you agree with the statement (Company or Brand X) is worth what I pay for it (1-10 scale)*

- 10 Strongly agree
- 1 Strongly disagree

*Six/twelve months from now, how likely are you to still be using (Company or Brand X)? (1-5 scale)*

- 5 Definitely will be using them
- 4 Probably will be using them
- 3 Might or might not be using them
- 2 Probably will not be using them
- 1 Definitely will not be using them

*How likely would you be to recommend (Company or Brand X) to friends and colleagues? (1-5 scale)*

- 5 Definitely would recommend them
- 4 Probably would recommend them
- 3 Might or might not recommend them
- 2 Probably would not recommend them
- 1 Definitely would not recommend them

*Of the following list of statements, please select the one that comes closest to your feelings (regarding Company or Brand X) (1-5 scale)*

- 5 I prefer them to all the other (firms/brands in category)
- 4 They are one of a few I prefer to other (firms/brands in category)
- 3 They are acceptable, but I have no particular preference for them
- 2 I somewhat prefer other (firms/brands in category)
- 1 I strongly prefer other (firms/brands in category)

**Table I.**  
Satisfaction/loyalty  
questions investigated

*Over the last (year (bank), three months (retail)) would you say that the total value of your (savings and investments/purchases) at (all firms/brands in category) you use has...? (1-5 scale)*

- 5 Increased a lot
- 4 Increased a little
- 3 Stayed the same
- 2 Decreased a little
- 1 Decreased a lot

*Over the last (year (bank), three months (retail)) would you say that the total value of your (savings and investments/purchases) at (Company or Brand X) has...? (1-5 scale)*

- 5 Increased a lot
- 4 Increased a little
- 3 Stayed the same
- 2 Decreased a little
- 1 Decreased a lot

**Table II.**  
Trend in spending  
questions investigated  
(banking and retail  
surveys only)

... the likelihood to recommend question proved to be the top correlate to actual customer behavior 80 percent of the time. More explicitly, if customers reported that they were likely to recommend a particular company to a friend or colleague, then these same customers were also likely to actually repurchase from the company, as well as generate new business by referring the company via word-of-mouth ... [the] results of this analysis also led to the discovery of a classification scheme, whereby customers can be grouped according to their joint loyalty and behavioral profiles ... Customers were segmented into three categories based on their "recommend" ratings and their combined purchase and referral rates. Using these groupings, customers can be characterized in terms of their joint profile of "what they say" and "what they will actually do".

As a result, so that we can better compare and contrast our findings with those of Reichheld (2003) and Satmetrix (2004), we created a new three-segment repurchase intention variable (i.e. the five-point scale was recoded into a three-point scale). Because our scales differ from those used by Reichheld (2003)/Satmetrix (2004), however, we wanted to be certain that our three cluster groupings were not only as similar as possible, but also that the groupings demonstrated high empirical validity in terms of the recoded variable's relationship to the customer behaviors investigated by Reichheld (2003).

Reichheld (2003) uses a 0-10 scale where the end anchors are labeled "extremely likely-not at all likely". The scale was segmented into three groups: ratings of 9-10, 7-8, and 0-6. The repurchase intention variable in our study, however, used a five point rating scale. Based upon the Reichheld (2003) groupings, it would appear that the comparable groupings would be ratings of 1-3, 4, and 5.

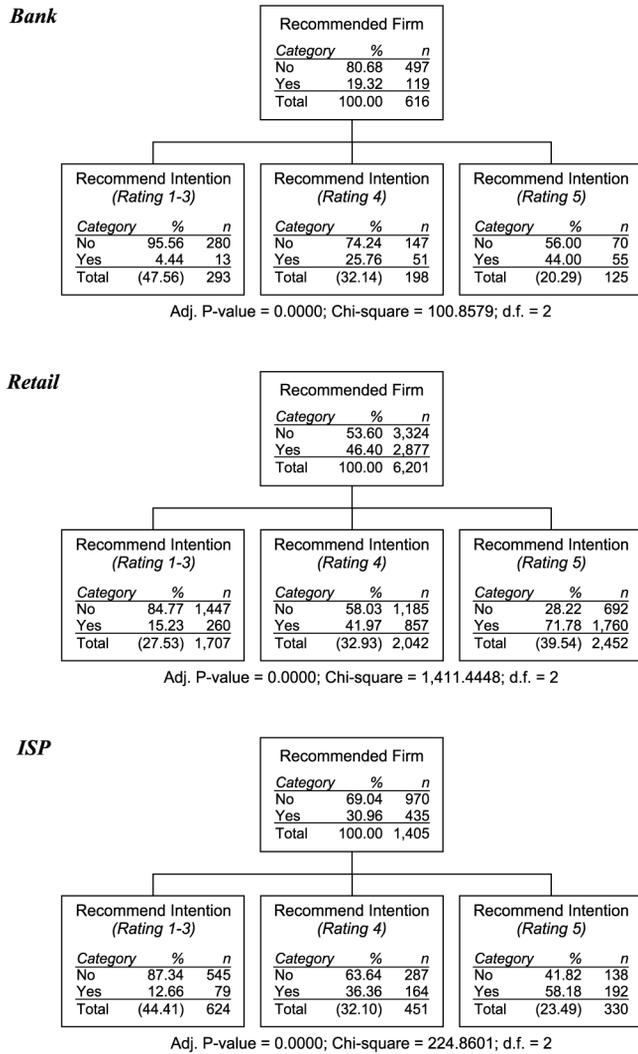
To empirically confirm the validity of this three-segment grouping *vis-à-vis* the variable's relationship to customer behavior, we conducted two separate chi-square tests. In the first analysis, chi-square tests were conducted for customer recommendations by recommend intention level for each industry (Figure 1). In each case, the groupings based upon the 1-3, 4, 5 rating levels were highly significant (i.e.  $p < 0.0001$ ). In the second analysis, chi-square tests were conducted using a combined variable of customer recommendations and retention[5] by recommend intention level for each industry (Figure 2). (Note that Reichheld (2003) and Satmetrix (2004) report examining the correlation of variables on repurchase (retention) and referral (recommendation) behavior). Again, in each case, the groupings based upon the 1-3, 4, 5 rating levels were found to be highly significant (i.e.  $p < 0.0001$ ). As a result, the analyses strongly support this three-segment grouping.

To be able to make apples-to-apples comparisons for all variables under investigation, new three-segment (recoded) variables were created for all attitudinal variables under investigation. Variables that used a five-point scale (repurchase intention, recommend intention, and brand preference) were recoded as follows: 1-3 recoded to 1, 4 recoded to 2, and 5 recoded to 3. Variables that used a ten-point scale (overall satisfaction, expectations, and customer value (worth what paid) were recoded as follows: 1-6 recoded to 1, 7-8 recoded to 2, and 9-10 recoded to 3.

#### *Correlation analysis*

Table III presents the median within industry correlations of the attributes under investigation with subsequent customer behaviors associated with customer loyalty. All values greater than 0.022 are significant at the 0.01 level (2-sided).

The first thing to note is that the vast majority of variables investigated explain less than 10 percent of the variance in the relationship (i.e.  $r < \text{SQRT}(0.1) = 0.32$ ). Given



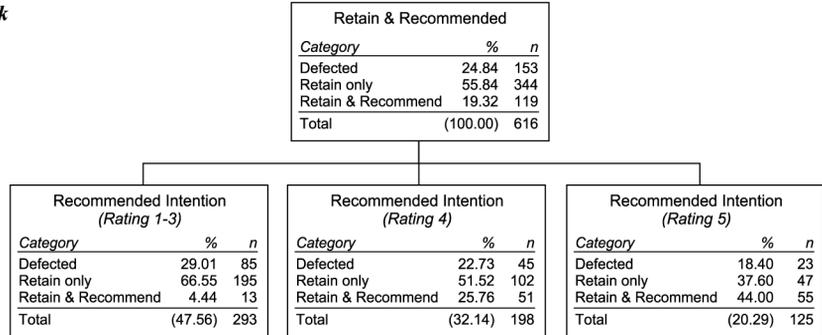
**Figure 1.** Chi-squared tests for customer recommendations by recommend intention level

the relatively modest correlation strength, it appears questionable that any single attitudinal measure alone would best gauge future customer behavior.

With regard to *H1*, that repurchase and recommend intentions will be more closely related to customer behavior than customer perceptions of satisfaction, value, and expectations, this hypothesis is not supported. The correlations in Table III clearly show that attitudes and intentions associated with customer loyalty differ in the strength of association to various customer behaviors. Furthermore, industry type impacts the association between customer attitudes and their subsequent behaviors.

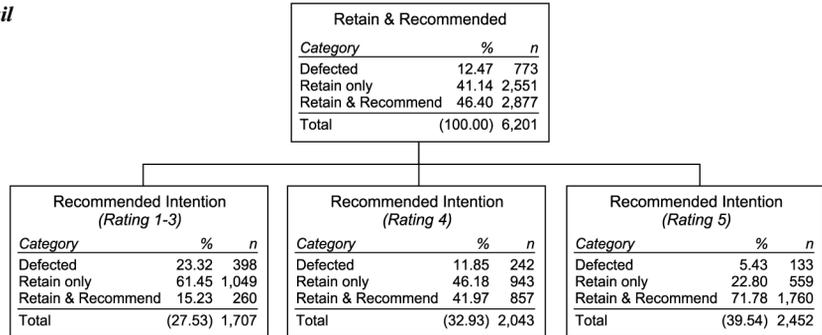
In general, *H2* and *H3* that repurchase intention best predicts retention, and recommend intention best predict future recommendations, are supported. The finding,

**Bank**



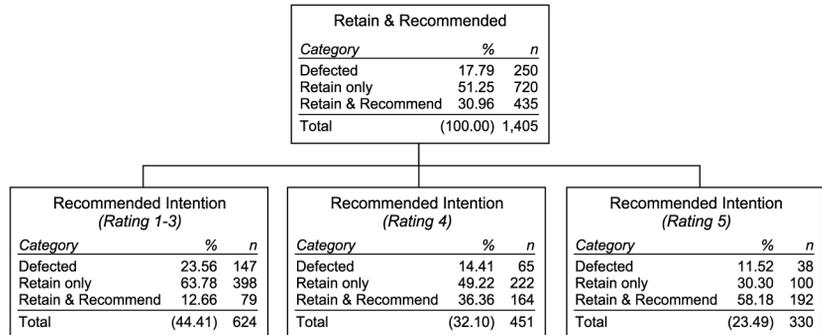
Adj. P-value = 0.0000; Chi-square = 95.8826; d.f. = 4

**Retail**



Adj. P-value = 0.0000; Chi-square = 1,530.1530; d.f. = 4

**ISP**



Adj. P-value = 0.0000; Chi-square = 220.3303; d.f. = 4

**Figure 2.**  
Chi-squared tests for retention-recommendations combined by recommend intention level

	Change in SOW	SOW	Recommend and retain	Retain	Recommend
<i>Banking</i>					
Share of wallet $t - 1$ (initial period)	-0.63	0.49	0.01	0.00	0.01
Recommend intention (recoded into 3 groups)	0.11	0.08	0.30	0.10	0.40
Recommend intention	0.12	0.10	0.31	0.12	0.38
Repurchase intention (recoded into 3 groups)	0.11	0.13	0.29	0.21	0.26
Repurchase intention	0.15	0.15	0.32	0.25	0.26
Overall satisfaction (recoded into 3 groups)	0.09	0.05	0.21	0.08	0.26
Overall satisfaction	0.09	0.06	0.22	0.10	0.26
Worth what paid (recoded into 3 groups)	0.03	0.13	0.21	0.06	0.29
Worth what paid	0.06	0.11	0.24	0.10	0.30
Expectations (recoded into 3 groups)	0.06	0.06	0.19	0.07	0.25
Expectations	0.09	0.09	0.23	0.10	0.27
Brand Preference (recoded into three groups)	0.07	0.14	0.31	0.16	0.34
Brand preference	0.10	0.16	0.32	0.19	0.33
Trend in total spend/savings in category	0.09	-0.12	0.04	-0.01	0.08
Trend in spending/savings with individual firm	0.12	0.03	0.17	0.13	0.14
<i>Retail</i>					
Share of wallet $t - 1$ (initial period)	-0.34	0.37	0.10	0.08	0.08
Recommend intention (recoded into 3 groups)	0.13	0.22	0.43	0.22	0.45
Recommend Intention	0.13	0.23	0.43	0.23	0.43
Repurchase intention (recoded into 3 groups)	0.16	0.28	0.43	0.29	0.40
Repurchase intention	0.16	0.28	0.41	0.29	0.38
Overall Satisfaction (recoded into 3 groups)	0.11	0.18	0.35	0.18	0.36
Overall iatisfaction	0.12	0.21	0.36	0.20	0.36
Worth what paid (recoded into 3 groups)	0.09	0.16	0.31	0.14	0.33
Worth what paid	0.09	0.20	0.34	0.17	0.35
Expectations (recoded into 3 groups)	0.09	0.16	0.32	0.15	0.33
Expectations	0.10	0.19	0.35	0.19	0.35
Brand Preference (recoded into three groups)	0.15	0.30	0.41	0.22	0.41
Brand preference	0.15	0.33	0.42	0.25	0.41
Trend in total spend/savings in category	0.07	0.00	0.06	0.03	0.07
Trend in spending/savings with individual firm	0.08	0.14	0.17	0.13	0.15
<i>ISP</i>					
Share of wallet $t - 1$ (initial period)					
Recommend intention (recoded into 3 groups)			0.34	0.14	0.39
Recommend intention			0.35	0.17	0.37
Repurchase intention (recoded into 3 groups)			0.36	0.26	0.32
Repurchase intention			0.35	0.27	0.30
Overall Satisfaction (recoded into 3 groups)			0.30	0.15	0.33
Overall satisfaction			0.30	0.16	0.32
Worth what paid (recoded into 3 groups)			0.28	0.12	0.31
Worth what paid			0.28	0.14	0.31
Expectations (recoded into 3 groups)			0.31	0.14	0.35
Expectations			0.31	0.15	0.34
Brand Preference (recoded into three groups)			0.33	0.15	0.37
Brand preference			0.34	0.19	0.36
Trend in total spend/savings in category					
Trend in spending/savings with individual firm					

**Table III.**  
Correlations of survey  
responses in Time 1 to  
customer behavior in  
Time 2

however, is not universal, and varies by industry and the type of customer behavior. It is important to note that for the combined recommend-repurchase variable, both repurchase intention and recommend intention were found to be almost identical in terms of the strength of association.

*H4* stated that repurchase intention would be more strongly correlated to share of wallet than customers' perceptions of satisfaction, value, and expectations, and customers' recommend intention. While directionally this is true, the differences were not always statistically significant.

With regard to share of wallet, however, the correlations in Table III reveal two other interesting findings. First, past share of wallet tends to be a better predictor of future share of wallet than attitudinal variables. Second, brand preference showed equal or stronger relationships to share of wallet than other intention or attitudinal metrics. This would appear to in part support the marketing literature that defines attitudinal loyalty as a preference for the brand (Bennett and Rundle-Thiele, 2002).

#### *Single or multi-item measures*

As noted earlier, Reichheld (2003, p. 50) states that models using multiple items to predict customers' purchase and recommend behavior provided "insignificant predictive advantage" when compared to the use of a single recommend intention question. As single item measures have been shown to be less reliable than multi-item scales/constructs (Wanous and Hudy, 2001; Wanous and Reichers, 1996; Wanous *et al.*, 1997), *H5* proposes that a multivariate model will perform better than a model consisting only of recommend intention.

To test the difference between single-predictor and multi-predictor models, we conducted two types of analyses. First we analyzed the incremental predictive value of multiple-predictor models relative to single-predictor models for Retention within each industry. We summarize these results in Table IV. As candidate predictors, we used all 15 of the survey response variables (listed in the rows of Table III). Among the ISP firms there is only a marginal increase in *R*-squared (adjusted) as one goes beyond the best single-predictor model, but the increase in *R*-squared (adjusted) is greater than 20 percent in the other two industries (Banks: 25 percent; Retail: 21 percent). Nevertheless, these models all have relatively modest predictive value.

Table V summarizes the results for the best single- and multiple-logistic ordinal regressions when using the combined Recommend-Retention variable as the dependent variable (0: not retained; 1: retained but did not recommend; 2: retained and recommended). Here we focus on models with recommend intention only and with both recommend intention and repurchase intention as predictors. Repurchase intention is used as the second predictor here because:

- (1) it is one of the most promising predictors based on the analysis in Table IV and an examination of the correlation tables for the Recommend-Retention variable (see Table III); and
- (2) it is the other variable explicitly examined by Reichheld (2003) and Satmetrix (2004).

In Table V, percent concordance represents the percentage of times that customer pairs are correctly ranked by the model on the Recommend-Retention scale, while the receiver-operating characteristic curve (ROCC) area represents the percentage of

Model type	$R^2$ %	Banking Predictor(s)	$R^2$ %	Retail Predictor(s)	$R^2$ %	ISP Predictor(s)
Best single-predictor model	5.9	Repurchase-intent <sup>a</sup>	8.7	Repurchase-intent (3 level) <sup>a</sup>	7.4	Repurchase-intent <sup>a</sup>
Best two-predictor model	6.5	Repurchase-intent <sup>a</sup> Brand preference	9.4	Repurchase-intent <sup>a</sup> Brand preference <sup>a</sup>	7.5	Repurchase-intent <sup>a</sup> Recommend-intent (3 level)
Best predictive model	7.3	Repurchase-intention <sup>a</sup> Brand preference <sup>b</sup> Satisfaction <sup>b</sup>	10.3	9-Predictor model	7.5	Same as above: Repurchase-intent <sup>a</sup> Recommend-intent (3 level)

**Notes:** All  $R^2$  values are adjusted; the Best Predictive Model is the model that minimizes the Akaike Information Criterion (AIC); <sup>a</sup>  $p < 0.01$  (two-sided); <sup>b</sup>  $p < 0.05$  (two-sided)

**Table IV.**  
Single versus multiple-predictor models for retention by industry

**Table V.**  
Prediction of  
recommend-retention  
based on recommend  
intention and repurchase  
intention in ordinal  
logistic regressions

Predictors	Banking		Retail		ISP	
	% Concordance	ROCC area	% Concordance	ROCC area	% Concordance	ROCC area
Recommend intention only versus repurchase intention only	52	65	59	72	55	67
Recommend intention and repurchase intention	62	67	65	74	64	70

**Notes:** In each model, all predictor coefficients are highly significant;  $p < 0.001$

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correct rankings of customer pairs when predicted ties are resolved randomly. In every case repurchase intention has significant incremental value ( $p < 0.001$ ), and when it is added to the model, the percent concordance increases by 18, 11, and 16 percent for firms in the Banking, Retail and ISP industries, respectively.

Finally, we studied multi-segment models for the Recommend-Retention dependent variable, by fitting latent class regression models. In this case, we looked at all firms together, using firm indicators as covariates, and using a reweighted maximum likelihood procedure to give each firm equal representation in the analysis. We experimented with employing each of the basic attitudinal variables as either a covariate (for classifying customers to segments) or as a within-segment predictor of Recommend-Retention. We found the best models, in terms of the Bayesian Information Criterion (BIC), using backward and forward stepwise analyses. The best single-predictor model uses Recommend-Intention across three customer segments (only firm indicators are used as covariates in this case). It misclassifies customers at a rate of 24 percent. The best multiple-predictor model is better in terms of BIC, and it uses recommend intention and worth what paid as predictors across four segments. In this model, firm indicators are used as covariates along with the three attitudinal covariates: repurchase intention, expectations and recommendation intention (coded into three groups). This model misclassifies customers at a rate of 11 percent.

## Discussion

Our investigation found that recommend intention does provide insight into customers' future recommend behavior. The assertion that recommend intention alone will suffice as a predictor of customers' future loyalty behavior (Reichheld, 2003; Satmetrix, 2004), however, is not supported.

We reach this conclusion based upon three primary findings. First, bivariate correlations of all the attitudinal variables and customer behaviors investigated tended to be modest. Second, when examining the three primary behaviors associated with customer loyalty (retention, share of wallet, and recommendations) (Reichheld and Earl Sasser, 1990; Zeithaml, 2000), recommend intention was generally not the best predictor for each of these variables. Third, multivariate models universally outperformed models that use only recommend intention.

These findings have clear implications for managers. In large part, because of the current popularity of Net Promoter, many firms look at recommend intention as the primary, even sole gauge of customer loyalty. The belief is that this metric best tracks customers' future loyalty behavior (and ultimately firm growth), and therefore it supercedes and makes irrelevant other measures. Based upon our research, however, the presumptions of these managers appear to be erroneous. Our findings call into question the rigor of the research reported by Reichheld (2003) and Satmetrix (2004) with regard to the relationship between various survey-based metrics and subsequent customer behavior. Without question, Reichheld and colleagues have done a service by stimulating debate and research on customer loyalty behaviors. Their findings, however, do not appear to be generalizable. (Our findings on the micro-level analysis of Reichheld (2003)/Satmetrix (2004), taken in conjunction with the findings of Keiningham *et al.* (2007) on their macro-level analysis, call into question the robustness of the entire study). The consequences are the potential misallocation of

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resources due to flawed strategies that are guided by a myopic focus on customers' recommend intentions.

Additionally, our findings clearly show that aggregate level attitudinal metrics are not strong predictors of customers' future behaviors as noted by the modest *R*-squares. This is not to discount their importance, but to point to the fact that any single metric designed to explain customer behavior across a diverse customer base is unlikely to be an adequate gauge upon which managers can act. Cooil *et al.* (2006) demonstrate the importance of segmenting customers based upon their characteristics when attempting to link customer perceptions to customer behaviors, as they have been found to moderate this relationship.

Furthermore, our findings demonstrate that customers' loyalty-based behaviors are multidimensional. In particular, no one metric best predicts all behaviors associated with customer loyalty. This implies that firms must balance and manage different aspects of the customer experience simultaneously if they are to optimize the loyalty behaviors they desire from their customers. For researchers, this implies that holistic models of loyalty will need to be developed to model the impact of these various dimensions of customers' loyalty behavior on firm financial outcomes. The impact of these dimensions is likely to vary by industry and customer characteristics. Furthermore, our research implies that each dimension is likely to be affected by differing aspects of the customer experience.

While loyalty is a concept that all managers want, we have found that it is not straightforward to translate customers' loyalty attitudes into customers' loyalty behaviors. As a result, there are no simple solutions for turning loyalty into profits. If it were easy, however, everyone would already be doing it.

### Notes

1. More recently, Reichheld has modified this claim, stating that Net Promoter yields slightly less accurate predictions for the behavior of individual customers, but a far more accurate estimate of growth for the entire business than models consisting of data from multiple survey items to predict firm growth (Reichheld, 2006).
2. It is important to note that a macro-level analysis of Net Promoter was also conducted by Reichheld, Bain & Company, and Satmetrix that linked firm-level Net Promoter scores to relative firm growth rates within their respective industries. Researchers, however, have reported being unable to replicate the findings reported by Reichheld (2003), Satmetrix (2004) and Keiningham *et al.* (2007).
3. Johnson and Fornell (1991) make the same argument in their work.
4. Specifically, it is the stated percentage of the total value of savings and investments at all financial institutions used by the respondent (excluding work related retirement plans and excluding the value of the respondent's home) held at the bank.
5. Respondents were required to be actual customers of the firm in the initial period to qualify for participation in the study. As a result, recommendations only occurred if the customer was actually retained, i.e. defectors did not recommend the brand. . .this does not mean that they did not engage in WOM, but that their WOM was not a recommendation. As we are seeking to examine the robustness of the Reichheld (2003)/Satmetrix (2004) findings and these papers investigated recommendations, we examine recommendation behavior. Therefore, there were three categorical outcomes in our retained-recommended variable: defection, retention-only, and retention with recommendations.

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*Marketing, Quality & Quantity, Journal of Economic Psychology, Journal of Public Sector Management, and Journal of Service Research.*

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384

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