



Beyond the Ultimate Question: Growing your business through new and existing customers

Using advocacy, purchasing and retention loyalty to
manage your customer relationships

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Business Over Broadway

Business growth through customer insight

The field of customer loyalty has received much technological innovation over the past decade. Improvements are clearly seen in data collection (Web-based loyalty surveys), data analyses (reporting portals with automated reports), employees' accessibility to customer survey results (24x7 online reporting portals), and integration of attitudinal loyalty data with behavioral loyalty data in CRM and business intelligence/analytics applications.

While there has been much improvement in the quality of managing customer loyalty survey data, the quality of the measurement and meaning of customer loyalty has not kept pace. Our latest research on customer loyalty, however, tries to narrow this gap. **Customer Loyalty 2.0** represents this advancement in the measurement and meaning of customer loyalty. The purpose of the discussion is to provide an overview of measures of customer loyalty and highlight our latest research findings on attitudinal measures of customer loyalty.

There has been a change in business nomenclature around the application of customer surveys from "customer relationship management" to "customer experience management." The analytical techniques used to understand the survey data (e.g., segmentation analysis, driver analysis), however, remain exactly the same. The ultimate goal, no matter what business nomenclature you use, is to identify the reasons why customers are loyal or disloyal. You might think of customer loyalty as the ultimate criterion in customer relationship/ experience management.

Objective Measures of Customer Loyalty and Financial Growth

There are several objective measures of customer loyalty:

- Number of referrals: Word of mouth/Word of mouse
- Purchase again
- Purchase different products
- Increase purchase size
- Customer retention/defection rates

We can see how customer loyalty can lead to financial growth. Through the referral process, companies can grow through the acquisition of new customers. The

idea is that the customer acquisition process relies on existing customers to promote/recommend the company to their friends, who, in turn, become customers. Another way of strengthening the financial growth of a company is through increased purchasing behavior (e.g., increase amount of purchases, purchase different products/services) of existing customers. Finally, financial growth is dependent on the company's ability to not lose existing customers at a faster rate than they acquire them. Customer defection rate is an important metric in the wireless service industry where processes such as number transfers and contract terminations make customer defections straightforward and routine.

Customer Loyalty Surveys

Customer surveys remain a frequently used way to assess customer loyalty despite the existence of objective measures of customer loyalty (e.g., defection rate, number of referrals). There are a few reasons for their popularity. First, customer surveys allow companies to quickly and easily gauge levels of customer loyalty. Companies may not have easy access to objective customer loyalty data or may simply not even gather such data. Also, surveys allow companies to assess customer perceptions and prioritize initiatives to increase customer loyalty. Second, results from customer surveys can be more easily used to change organizational business process. Customer surveys commonly include questions about customer loyalty as well as the customer experience (e.g., product, service, support). Used jointly, these questions can be used (e.g., driver analysis, segmentation analysis) to identify reasons why customers are loyal or disloyal. Finally, objective measures of customer loyalty provide a backwards look into customer loyalty levels (e.g., defection rates, repurchase rates). Customer surveys, however, allow companies to examine customer loyalty in real-time. Surveys solicit questions regarding expected levels of loyalty-related behavior and provide opportunities for companies to "look into the future" regarding customer loyalty.

Measurement of Customer Loyalty

Customer loyalty, when measured through surveys, is assessed through the use of questions or items, mirroring the objective measures listed earlier. Typically, for each item, customers are asked to rate their level of likelihood of engaging in a specific

behavior. Commonly used customer loyalty survey questions include the following items:

- Overall satisfaction
- Likelihood to choose again for the first time
- Likelihood to recommend
- Likelihood to continue purchasing same products/services
- Likelihood to purchase different products/services
- Likelihood to increase frequency of purchasing
- Likelihood to switch to a different provider

Most of the questions allow respondents to indicate their likelihood of behaving in different ways toward the company (e.g., 0 = Not at all likely to 10 = Extremely likely). The satisfaction question is sometimes used in customer loyalty measurement and is rated on a scale (e.g., 0 = Extremely dissatisfied to 10 = Extremely satisfied). For all questions, higher ratings reflect higher levels of customer loyalty. It should be noted that different scale values (e.g., 1-5, 1-10) can be used.

Objective vs. Subjective Measures of Loyalty and Measurement Error

It is important that we make an important distinction between objective measures of loyalty and subjective measures of loyalty. Objective measures of customer loyalty have minimal measurement error associated with them. Because these measures are not subject to interpretation, these objective loyalty measures have unambiguous meaning. The number of recommendations a customer makes is clearly distinct from the number of repeat purchases that customer makes. This is not to say that these measures of customer loyalty are unrelated, but that they are measurably different entities (similar to the fact that height and weight are different constructs but are related to each other – taller people tend to weigh more than shorter people).

Measuring customer loyalty via questions on surveys is an entirely different process; customers' ratings of each loyalty question become the measure of customer loyalty. Even though we can calculate separate loyalty scores, one for each question, the distinction among the loyalty questions are not warranted. Because of the way customers interpret

survey questions and the inherent error associated with measuring psychological constructs, ratings need to be critically evaluated to ensure we understand the meaning behind the ratings (American Educational Research Association, American Psychological Association, and National Council on Measurement in Education, 1985). When using questionnaires to measure constructs, we need to be mindful of how the customers interpret and respond to the questions.

Loyalty questions may appear to measure very different types of loyalty but customers do not make those same distinctions when ratings these questions.

In psychological measurement terms, the loyalty questions are simply observable indicators of a single underlying construct (See Figure 1). Specifically, customers' rating of each of the questions (loyalty items) is simply a function of an underlying construct (loyalty). That is, customers respond consistently across all the loyalty questions. A customer who is loyal will rate each loyalty question high and a customer who is disloyal will tend to rate each loyalty question low.

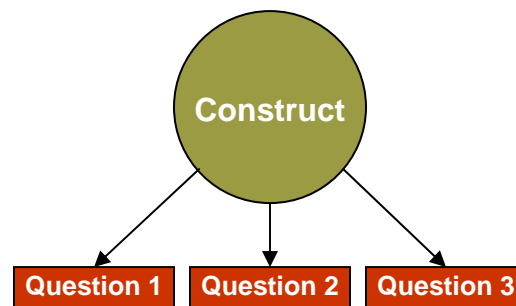


Figure 1. Relationship between a construct and its questions.

What Loyalty Questions are Measuring: A Factor Analytic View

To determine the extent of commonality across the loyalty items, the items were subjected to a series of analyses using responses from actual customers. Two separate studies were conducted, each within a specific industry: 1) Wireless Service Providers, and

2) Personal Computer Manufacturers. For each study, surveys were fielded in June and July 2007, respectively, asking a sample of about 1,000 general consumers in the United States ages 18 and older about their attitudes toward their wireless service provider or personal computer manufacturer. All respondents were interviewed to ensure they meet correct profiling criteria, and were rewarded with an incentive for filling out the survey. The survey data for this study were collected by GMI (Global Market Insite, Inc.).

The seven loyalty items listed earlier were included in the wireless service provider sample. For the PC manufacturer sample, the first six questions were used with an additional question added (Likelihood to increase frequency of purchasing). For each study, a factor analysis was conducted on the set of loyalty questions.

		Factors*		
		1 (Advocacy)	2 (Purchasing)	3 (Retention)
Questions (Items)	Overall Satisfaction	.79	.34	.35
	Choose Again	.71	.41	.43
	Recommend	.78	.40	.39
	Purchase Same	.61	.37	.58
	Purchase Different	.29	.75	.23
	Purchase Increase	.26	.76	.09
	Likelihood to Switch to Another Provider ¹	.32	.12	.68

*Based on a factor analysis with Varimax rotation. ¹Reverse coded so higher scores mean lower likelihood of switching.

Figure 2. Factor Pattern Matrix of the seven loyalty questions for the wireless service provider study.

Factor analysis, in statistical terms, is a data reduction technique that explains the statistical relationships among a given set of variables using fewer unobserved variables (factors). In simpler terms, a factor analysis tells us two things: 1) The number of factors (construct) that are being measured by the set of questions and 2) Which questions are related to which factors.

Specifically, for our problem, a factor analysis will help us determine if the set of seven original loyalty questions are actually measuring fewer constructs (factors). It is important to note that an exploratory factor analysis involves some form of judgment when

determining the number of factors as well as which variables are related to the smaller set of factors. A full discussion is beyond the scope of this discussion but the interested reader can read more about this topic (Hayes, 1997).

		Factors*	
		1 (Advocacy)	2 (Purchasing)
Questions (Items)	Overall Satisfaction	.77	.32
	Choose Again	.81	.35
	Recommend	.90	.34
	Purchase Same	.81	.39
	Purchase Different	.49	.54
	Purchase Increase	.35	.92
	Purchase Frequency	.32	.79

*Based on a factor analysis with Varimax rotation.

Figure 3. Factor Pattern Matrix of the seven loyalty questions for the PC manufacturer study.

The elements in the factor pattern matrix are called factor loading and essentially reflect the correlation between each item and the three factors. Higher factor loadings indicate a stronger relationship between the item and the underlying factor.

There are three types of customer loyalty: advocacy, purchasing and retention loyalty.

The results of the factor analysis suggested that there is considerable overlap among some of the loyalty items. In fact, the results suggest that the seven (7) items measure fewer constructs (three constructs for the Wireless sample and two for the PC sample). Figures 2 and 3 represent the factor pattern matrices.

Advocacy, Purchasing and Retention Loyalty

The labeling of the factors involves examining the content of the items that have high factor loadings. The naming of factors in a factor analysis involves some level of creativity and subjectivity. Other researchers might label the factors with different words (but probably similar words); the underlying construct being measured, however, remains the same.

The items that load on the first factor appear to have a strong emotional component to them, reflecting the extent to which customers advocate the company. Consequently, this factor was labeled Advocacy Loyalty. The items that load on the second factor reflect specific purchasing behaviors. This second factor is labeled Purchasing Loyalty. For the wireless service provider sample, the item that represents the third factor reflects retention (opposite of switching) and is, therefore, labeled Retention Loyalty.

Results suggest that there are three types of customer loyalty: advocacy, purchasing, and retention loyalty. Loyalty indices for each can be calculated by averaging the loyalty items that load highly on the same factor:

- **Advocacy Loyalty Index (ALI):** Reflects the degree to which customers will be advocates of the company (average across satisfaction, recommend, choose again, purchase same)
- **Purchasing Loyalty Index (PLI):** Reflects the degree to which customers will increase their purchasing behavior (average across purchase different, purchase increase, purchase frequency)
- **Retention Loyalty Index (RLI):** Reflects the degree to which customers will remain with a given company (single defection item – reverse coded)

Reliability of Loyalty Indices

Reliability estimates were calculated for each of the loyalty indices. Reliability deals with the extent to which measurement is free from random error. For the Wireless Service Provider sample, the reliability (Cronbach's alpha) of the Advocacy Loyalty Index (ALI) was .92. The reliability estimate (Cronbach's alpha) for the Purchasing Loyalty Index (PLI) was .82. For the Personal Computer Manufacturer sample, the reliability of the ALI was .94. The reliability of the PLI was .87. These levels of reliability are considered very good for attitude research (Nunnally, 1978; 0 = no reliability, 1 = perfect reliability).

Net Promoter Score vs. Satisfaction vs. Purchase Same

Of particular interest are three specific loyalty items that load on Factor 1 in each study: 1) Satisfaction, 2) Recommend, and 3) Purchase same. The Net

Promoter Score (NPS) developers state that the "recommend" question is the best predictor of business growth (Reichheld, 2003, 2006). This conclusion has come under recent attack from other researchers who have found that the "satisfaction" and "purchase same" questions are just as good as the "recommend" question in predicting business growth (Fornell, et al., 2006; Keiningham, et al., 2007; Morgan & Rego, 2006).

There is no scientific evidence that the "recommend" question (NPS) is, or should be, a better predictor of business growth compared to other loyalty questions.

The current factor-analytic findings cast additional doubt on the conclusions by the NPS camp. The recommend question appears to measure the same underlying construct as these other two loyalty questions. There is no scientific evidence that the "recommend" question (NPS) is, or should be, a better predictor of business growth compared to other loyalty questions.

Single Item Measures or Aggregated Metrics

The NPS developers support the use of a single question to understand customer loyalty. This single-item approach is not supported with the present study findings. There is nothing unique and special about the "recommend" question. Furthermore, single-item measures are less reliable (contain more measurement error) than multiple-item measures. Measuring loyalty with a single question is akin to measuring math skills with a single item math test. An answer to the single item test would be a less reliable reflection of math skills compared to the combined answers to a 50-item math test. Would you want your child's SAT score to be determined by a single question of the test or the entire set of questions on the test? Using the loyalty indices in customer loyalty management is statistically better than using any single question because the indices provide a more precise measure of loyalty than any of the items used alone.

Ranking Companies on Loyalty

For each study, the loyalty indices were calculated for each company. Figures 4 and 5 contain the average loyalty indices for the PC Manufacturers and the Wireless Service Providers, respectively. The results show that the loyalty indices were able to detect meaningful difference across the companies.

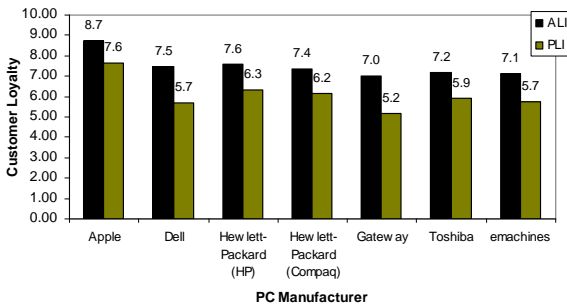


Figure 4. Bar Graph of Loyalty Scores for PC Manufacturers

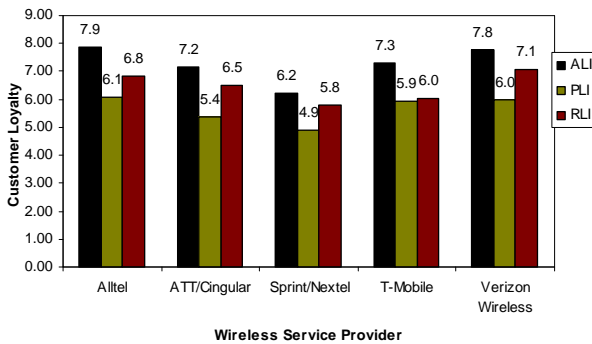


Figure 5. Bar Graph of Loyalty Scores for Wireless Service Providers

The analyses show that the loyalty indices, ALI and PLI, are sensitive enough to detect differences across the different companies; it appears that the measurement precision of each of the loyalty scales are able to detect meaningful differences across different companies, thus allowing researchers and practitioners the ability to reliably study different types of loyalty across different groups of customers.

ALI, PLI and RLI Predict Business Growth

To understand how well the ALI and PLI predict future growth, objective loyalty measures for the Wireless Service Providers were collected for Q3 2007 (fiercewireless.com and quarterly reports from provider's respective Web sites).

The ALI, PLI and RLI (Q2 2007) were highly predictive of business growth (Q3 2007).

Each of the loyalty indices were correlated with each of the following objective loyalty measures that were collected in Q3 2007 (see Table 1 for values):

- Average Revenue Per User (ARPU) Growth (Q2-Q3 2007)
- Churn for Q3 2007 (*reverse coded so higher scores reflected better retention)
- % Total of New Customer Growth (Q2-Q3 2007) - estimated from churn rate and net new customers

	ARPU Growth (Q2-Q3 2007)	Churn Q3 2007	Percent Total New Customer Growth Q2-Q3 2007
Alltel	\$1.86	1.9%	3.7%
AT&T	\$0.19	1.7%	4.7%
Sprint/Nextel	-\$1.00	2.3%	2.3%
T-Mobile	\$2.60	2.9%	5.9%
Verizon Wireless	\$0.33	1.2%	6.8%

Table 1. Objective Loyalty Measures for Wireless Service Providers

The correlations for each of the loyalty indices with each of the objective loyalty measures are located in Figure 6. As we can see, each of the loyalty indices (Q2 2007) were differentially related to the objective loyalty measures (Q3 2007).

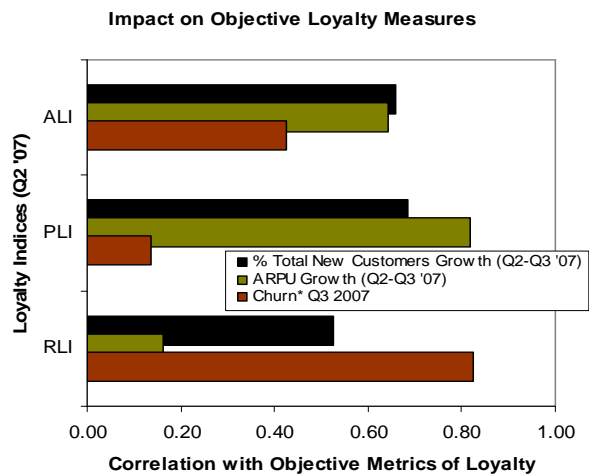


Figure 6. Impact of each Loyalty Index on Objective Loyalty Measures

The ALI had its greatest impact on new customer growth; companies who had higher ALI scores experienced greater new customer growth compared to customers who had lower ALI scores. Figure 7 illustrates the relationship between the ALI and new customer growth.

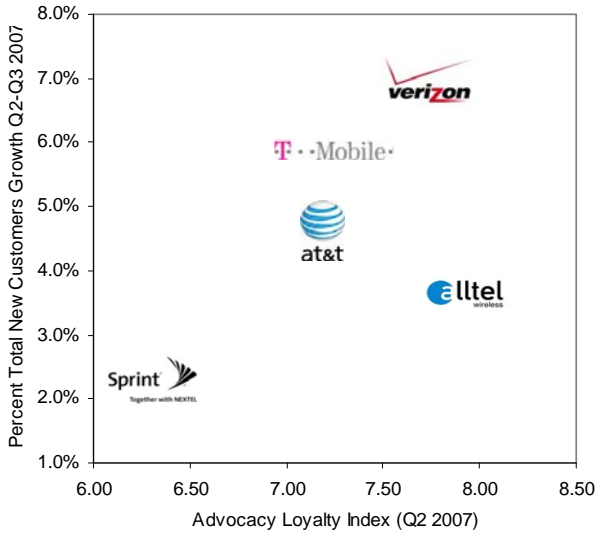


Figure 7. Relationship between Advocacy Loyalty Index and New Customer Growth

The PLI, however, was highly predictive of Average Revenue Per User (ARPU) growth; companies who had higher PLI scores also experienced greater ARPU growth compared to companies who had lower PLI scores. Figure 8 illustrates the relationship between the Purchasing Loyalty Index and ARPU Growth.

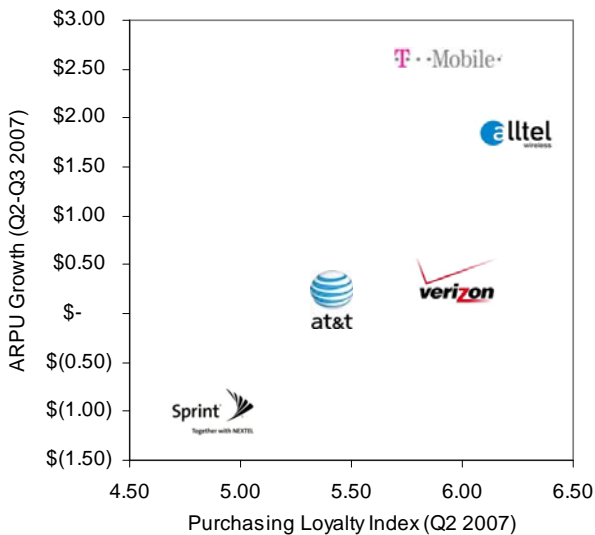


Figure 8. Relationship between Purchasing Loyalty Index and ARPU Growth

Finally, The Retention Loyalty Index was the best predictor of actual churn rates for Wireless Service Providers; companies who had higher RLI scores had lower churn rates compared to companies who had lower RLI scores. Figure 9 illustrates the relationship between the Retention Loyalty Index and churn rate.

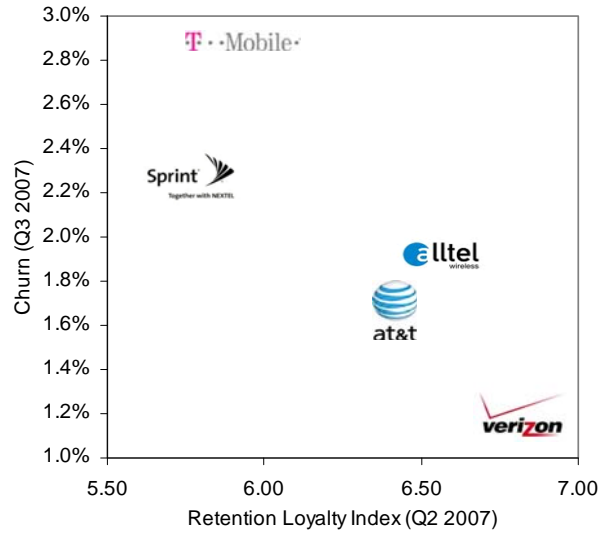


Figure 9. Relationship between Retention Loyalty Index and Churn Rate

The results show that loyalty indices are predictive of future business growth through new customers (New customer growth) and existing customers (ARPU), suggesting that the ALI, PLI and RLI are useful measurement instruments in managing customer loyalty and business growth. While the present results are only based on the wireless industry, the findings showing the predictive power of the ALI and PLI are very compelling. Future research in other industries can help verify and extend the current findings.

Hayes Loyalty Grid

The two loyalty indices, ALI and PLI, assess the types of potential business growth that companies are likely to experience in the future. The ALI assesses new customer growth while the PLI assesses purchasing growth. The Hayes Loyalty Grid charts the ALI and PLI which helps companies understand where they rank in the competitive landscape with respect to predicted business growth. Two examples of the Hayes Loyalty Grid appear in Figures 10 and 11. Figure 10 represents the Hayes Loyalty Grid for the PC industry and Figure 11 represents the Hayes

Loyalty Grid for the wireless service provider industry.

The Hayes Loyalty Grid helps companies understand where they rank in the competitive landscape with respect to predicted business growth.

As is seen in Figure 10, there is considerable variability across PC manufacturers with respect to their growth potential. Clearly, Apple Computers have high levels of both advocacy loyalty and purchasing loyalty. They, compared to other PC manufacturers, should expect to see faster growth with respect to acquiring new customers and increasing the purchase behavior of existing customers.

HP (HP) and Apple appear in the upper right quadrant, suggesting that both PC manufacturers are poised to experience faster growth with respect to customer acquisition and increased purchases from existing customers. HP (Compaq) and Dell's growth potential are on par with the industry average. Located in the lower left quadrant, Gateway, Toshiba and emachines, relative to their competitors, are expected to experience slower growth in both customer acquisition and increased purchases from existing customers.

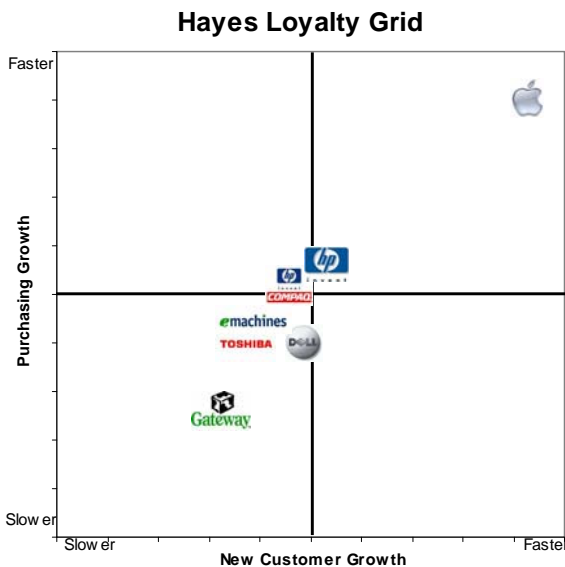


Figure 10. Hayes Loyalty Grid for the PC Industry

As you can see in the Figure 11, Alltel and Verizon appear in the upper right quadrant, suggesting that they are poised to experience faster growth with respect to customer acquisition and increased purchases from existing customers. Additionally, T-Mobile customers indicate that they are likely to increase their purchase behavior at the rate comparable to the customers of Alltel and Verizon.

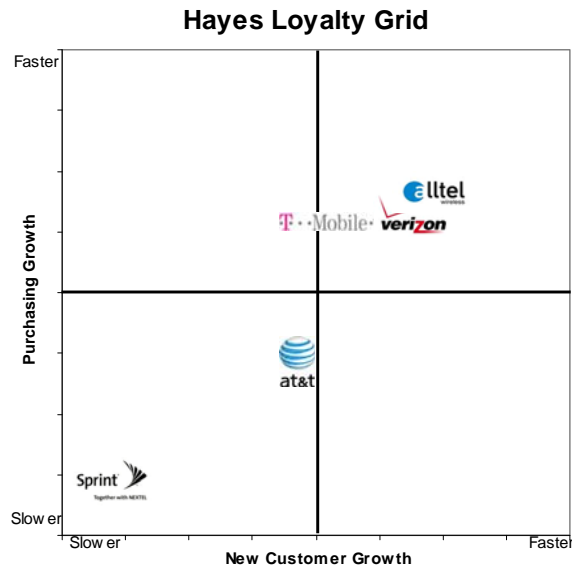


Figure 11. Hayes Loyalty Grid for the Wireless Industry

AT&T's new customer growth potential is on par with their industry average. Located in the lower left quadrant, Sprint/Nextel, relative to their competitors, will experience slower growth in both customer acquisition and increased purchases from existing customers.

Loyalty Driver Analysis

Companies are not static entities; they can change business practices to address customer loyalty issues, which could ultimately impact their growth potential. The next section will use the new loyalty indices for a specific PC Manufacturer to identify which business attributes are responsible for driving advocacy loyalty and purchasing loyalty. By measuring advocacy and purchasing loyalty, companies can more effectively manage their customer relationships to help them grow their business through new and existing customers.

Two pieces of information are examined in a loyalty driver analysis: 1) derived importance: the degree of impact of each business attribute on customer loyalty

and 2) performance: the level of performance of each business attribute.

Using both the derived importance of each business attribute and the performance (e.g., rating) of each business attribute, we can create a Loyalty Matrix (see figures below) that allows us to visually examine all business attributes at one time.

The abscissa (x-axis) of the Loyalty Matrix is the performance rating (agreement, performance, satisfaction) of the business attributes. The ordinate (y-axis) of the Loyalty Matrix is the impact (derived importance) of the business attribute on customer loyalty. The Loyalty Matrix is divided into quadrants using the average score for each of the axes. Business attributes that appear in the upper left quadrant and are often referred to as Key Drivers.

Key drivers reflect business attributes that have both a large impact on customer loyalty and have low performance ratings relative to the other business attributes (these key drivers appear in red). Because we have two customer loyalty indices, we can calculate multiple separate Loyalty Matrices, each for the specific customer loyalty index. Loyalty Matrices for a particular PC Manufacturer appear in Figure 12 and Figure 13.

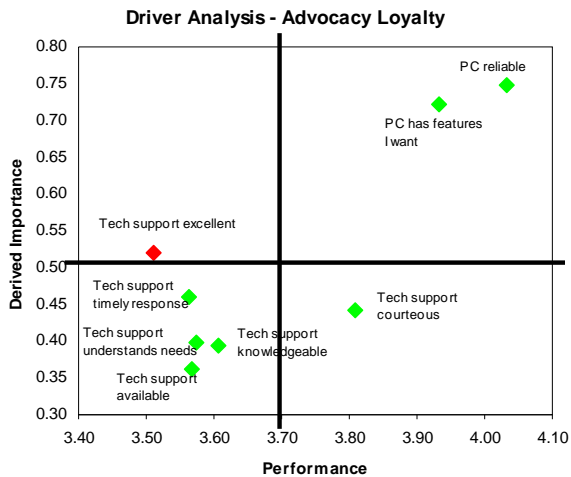


Figure 12. Advocacy Loyalty Driver Analysis - PC Manufacturer

With regard to advocacy loyalty, both of the PC attributes (PC reliability, and PC features) have a big impact on advocacy loyalty, more so than the technical support attributes. Whether customers will

be advocates of this PC manufacturer depend highly on the computer itself and less so on the quality of technical support.

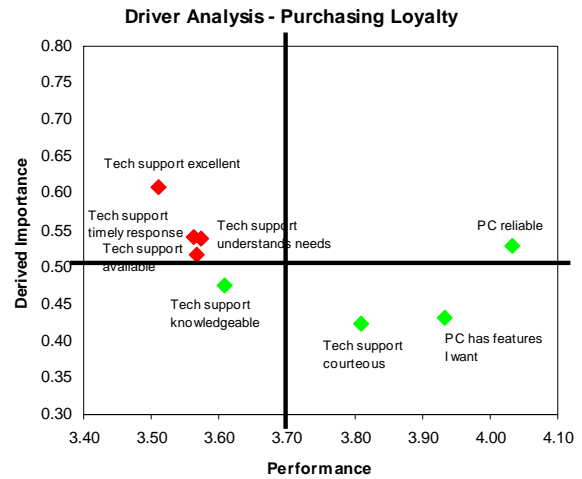


Figure 13. Purchasing Loyalty Driver Analysis - PC Manufacturer

With regard to purchasing loyalty, however, we see that many of the technical support attributes (excellence, timeliness, understands needs, availability) have a relatively big impact on purchasing loyalty. Interestingly, PC attributes do not have a big impact on purchasing loyalty.

By measuring advocacy and purchasing loyalty, companies can more effectively manage their customer relationships to help them grow their business through new and existing customers.

Using the two Loyalty Matrices, we can draw some conclusions regarding how this particular PC Manufacturer can increase advocacy loyalty and purchasing loyalty. To improve advocacy loyalty, the driver analysis seems inconclusive. While PC features are big determinants of advocacy, they are rated as relatively good. Consequently, there is not much room for improvement in these attributes. The technical support attributes, while rated as relatively low, do not have a large impact on advocacy loyalty.

If this PC Manufacturer wants to improve purchasing loyalty, however, the results of the driver analysis indicate that they should focus on improving

technical support attributes as these attributes have a relatively large impact on purchasing loyalty and have much room for improvement.

Summary

Customer loyalty is not a unidimensional construct. Results of two studies show that there are three general types of customer loyalty: advocacy loyalty, purchasing loyalty and retention loyalty. These three types of loyalty can be reliably measured, and each provides unique and useful information regarding the quality of the customer relationship. Each of the loyalty indices was predictive of actual future growth (e.g., business outcomes). Customer Loyalty 2.0 is aimed at helping companies to effectively measure and manage the different types of customer loyalty. By measuring advocacy, purchasing and retention loyalty, companies will be better able to manage their customer relationships to maximize growth through new and existing customers.

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