



# How to Use a Loyalty Analysis

## A description of typical applications

**M**ost companies acknowledge that it costs from five to 10 times more to acquire a new customer than to retain an existing one. So a lot of time, energy, and conversation are devoted to the idea of building customer loyalty.

Unfortunately, most companies have no reliable way to measure customer loyalty and have no effective way to see if their efforts to increase it are bearing fruit. They are usually limited to deriving loyalty measures by looking at total revenues or revenues from individual customers. This makes the best and worst customers easy to spot. But quantifying the loyalty and value of the huge middle majority of customers has been impossible until recently. Now that Loyalty Builders has developed an effective set of measures for this task, a commonly asked question is, “How do we use this new information?”

Typically, business managers have two main objectives when using loyalty information. First, they want to understand the behavior of their customers as a whole, so they can sharpen their messages and refine their product offerings. Second, they want to drill down to the account

level and find groups of customers with common attributes to whom they can direct specific marketing campaigns. This white paper describes nine techniques that can be used to meet those objectives.

### 1. FIND OUT WHO YOUR BEST, MIDDLE AND WORST CUSTOMERS ARE AND WHY.

Loyalty analysis reveals who your most loyal customers are and gives you information that helps you retain them and build a more profitable relationship with them.

When your customer transaction data is analyzed, each customer is assigned a Loyalty Score (LScore). This score is based on their behavior as customers and is derived from sales and other data. LScores are absolute measures, comparable from one analysis to the next and from one company to another.

Customers with similar scores are then put into Loyalty Groups (LGroups) (for details, see our white papers, “*Quantifying Customer Loyalty*” and “*The Mathematics of Customer Loyalty*” on [loyaltybuilders.com](http://loyaltybuilders.com)). Most companies end up with four to six groups of customers who behave in significantly different ways. In a

### 9 Techniques for Exceeding Your Marketing Campaign Objectives

1. Find out who your best, middle and worst customers are and why.
2. Use an early warning system that reveals eroding customer loyalty.
3. Run more effective marketing campaigns by targeting customers that loyalty analysis identifies as likely to buy in the near future.
4. Identify customers who are good candidates to purchase from a product category from which they have not previously bought.
5. Spotlight your best dealers and support them more effectively.
6. Find which products and services drive sales of other products and services.
7. Predict future revenues more accurately.
8. Get a clearer picture of the health of your customer population.
9. Manage customer relationships to build loyalty.

world where segmentation has traditionally been demographic (age, income, geography, etc.) this is a new kind of segmentation of the customer population.

A related measure, Loyalty Rank (LRank) describes a customer's percentile rank (from zero to 100) compared to other customers being analyzed at the same time. Unlike LScore, LRank is valid only for the current analysis. A customer's LScore may rise from one analysis to the next, yet their LRank may drop if the LScore of the customer population as a whole rises even more.

Taken together, LScore and LRank describe how loyal and valuable a particular customer is, based on purchase

behavior. Sales staffs and customer-service representatives can use these measurements to respond to customers appropriately and apply their time and resources most productively.

As useful as it is to segment your customer population based on their loyalty scores, there is a surprising additional benefit. Crosstab analysis of loyalty variables, such as revenue or number of orders, by LGroup against a particular business parameter (for example, product line or sales region), often reveals new and interesting patterns in that business parameter. Almost always, these new patterns are masked when the analysis combines the LGroups. Thus, scoring customers by loyalty gives a

company valuable, new information both about itself and about individual customers. Table 1 shows some of the customer measures that Loyalty Builders provides its clients.

Amount Score (AmtScore) is a new and useful parameter we have developed. A company usually will have many customers who are very committed to it. But over each customer's life cycle, he or she will contribute different amounts to company revenue totals. For example, Customer A makes a large first purchase but small subsequent purchases—a suggestion of declining loyalty. Customer B, however, makes a small first purchase, but greater than average or growing follow-up purchases, thus indicating growing loyalty. Total revenue from Customer A could be greater than Customer B, but Customer B may be a better customer in the long run. AmtScore differentiates between these customers.

AmtScore measures the deviation of the dollar value of purchases by a customer from the median dollar value of all purchases by all customers. The number of purchases is factored out, so this is a "per-purchase" measure of the revenue value of this customer. It is based on the purchase history of the total customer base and, rather than simply considering the total revenue generated by the customer, takes into account changes in type and size of purchases as the customer's relationship with the company develops. The higher the AmtScore, the better that customer is.

**TABLE 1**  
**CUSTOMER LOYALTY MEASURES**

<b>FIELD NAME</b>	<b>FIELD DESCRIPTION</b>
<b>EndDate</b>	Analysis period end date
<b>CustAcctNum</b>	Customer account number
<b>TotAmt</b>	Total amount of purchases
<b>IntAmt</b>	Revenue during the last analysis period (interval)
<b>NumOrders</b>	Number of orders; all purchases on a given day are combined into one order
<b>CatScore</b>	Weighting factor for number of product categories purchased
<b>LScore</b>	Loyalty score
<b>dLScore</b>	Change in LScore since last analysis
<b>LRank</b>	Percentile rank by LScore for this analysis
<b>dLRank</b>	Change in LRank since last analysis
<b>LGroup</b>	Loyalty-based segmentation group
<b>AmtScore</b>	Measures revenue value of customer to firm
<b>RR Score</b>	Balances retention and recency
<b>NxtPprob</b>	Probability of next purchase
<b>PurDelC</b>	Customer-based purchase delay
<b>PurDelH</b>	Historical purchase delay

RR Score balances Retention (how long a customer has been a customer) with Recency (how long it has been since this customer's last purchase). Without such a balancing factor, loyalty scores are easily distorted. Both "best" and "worst" customers may have long retention. Their loyalty, however, depends on what they have done recently. RR scores keep recent purchases by new customers from skewing loyalty scores. RR Scores are scaled from 0 to 10, and higher numbers are better.

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## **2. USE AN EARLY WARNING SYSTEM THAT REVEALS ERODING CUSTOMER LOYALTY.**

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Purchase Delay (PD) is a new measure available to Loyalty Builders clients. This parameter reports the number of purchases that a customer should have made since his previous purchase, based on his past behavior. A PD less than 1.0 means that a customer is still on track and not expected to have made a purchase by the date of the analysis. A PD of 2.7, for example, means that almost three more purchases were expected, but not made, from this customer at this point in time.

Loyalty Builders delivers two types of Purchase Delays: an absolute measure based only on a customer's purchases (PurDelC) and one that measures a customer's purchase delay over time (PurDelH, where H stands for Historical). Both are needed to really understand what is happening. For example, a good customer might have been buying every couple of weeks, establishing a basic

inventory, and then moved into a maintenance mode of buying every quarter. PurDelC would show a large delay, because of the change to maintenance mode, while PurDelH would show that the customer has been a good purchaser over time. In this case, marketing should notice the change indicated by PurDelC, note that the customer is a very good one from PurDelH and make a "social call" instead of an aggressive marketing call.

One effective use of this parameter is to identify customers who have scored well in the past (with high LRank or high LGroup) but who now have a large PD. Here, PD identifies valuable customers who have significantly slowed down their rate of purchase and who should be contacted in the very near future, before they drift away from the company. At the other end of the scale, PD will spot customers who may be accelerating their rate of purchase. Those customers may not be getting the attention they now deserve.

Two other measures, dLRank and dLScore, are also good indicators of changing customer behavior. dLRank measures the "delta" or change in LRank since the previous analysis. dLScore does the same for LScore. A customer with dLRank values larger than plus10 or smaller than minus 10 definitely point to a new situation with that customer.

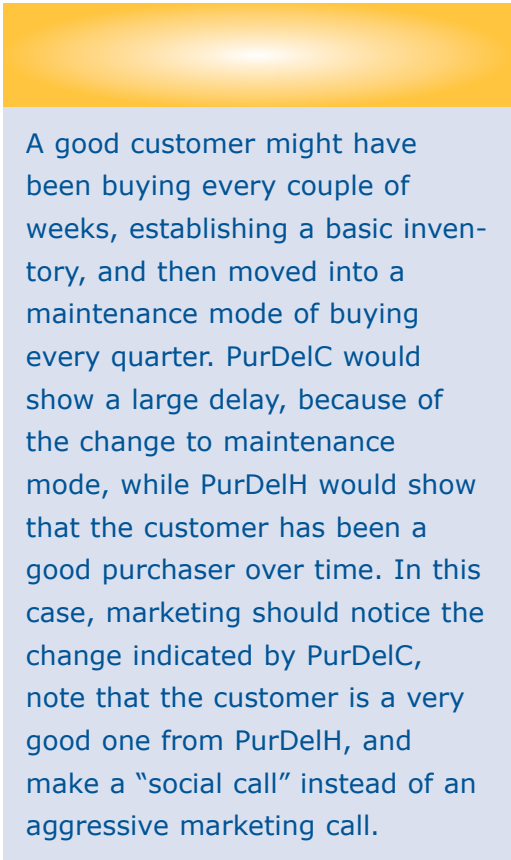
dLScore changes of over 50 also need attention.

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## **3. RUN MORE EFFECTIVE MARKETING CAMPAIGNS BY TARGETING CUSTOMERS THAT LOYALTY ANALYSIS IDENTIFIES AS LIKELY TO BUY IN THE NEAR FUTURE.**

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Knowing which customers are likely to buy again in the near future and what they are planning to buy can open



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many opportunities for your company. You can make offers that bundle an expected purchase with another product you want to feature, growing the size of their market basket. Telemarketing to these customers may accelerate the timeframe of their purchase and boost revenues.

If there is a product category in which sales are lagging behind expectations, you can market to customers who have been identified as likely purchasers of that category and so correct a revenue shortfall. Catalogs or other direct-mail pieces can be sent to a pre-selected audience, reducing mailing costs and raising response rates.

**4. IDENTIFY CUSTOMERS WHO ARE GOOD CANDIDATES TO PURCHASE FROM A PRODUCT CATEGORY FROM WHICH THEY HAVE NOT PREVIOUSLY BOUGHT.**

Customers often get into a rut, buying the same categories of products and not venturing into other areas of

what a business is selling. The business would like to broaden a customer's choices and wants to capture a 'bigger share of [the customer's] wallet' or 'enlarge the market basket.' If your business would like to do this, you should consider an analysis which identifies 'next logical product.'

This is a special kind of purchase probabilities analysis that uses the basic loyalty segmentation as a basis. The analysis looks at what combinations of products or services customers have purchased to find frequently occurring bundles or packages of products and uses that information to predict new kinds of purchases for customers. Once you know which customers are likely to make a first time

purchase of a new product type, you can generate specific offers to them. Such purchases will typically represent new revenue to your business.

**5. SPOTLIGHT YOUR BEST DEALERS AND SUPPORT THEM MORE EFFECTIVELY.**

Whenever individual customers can be uniquely associated with particular dealers, customer scoring can be used as the basis for dealer evaluation. Obviously, revenue contributed by the customers of a dealer is one important metric. However, that number may obscure important contributions from dealers with a smaller number of customers but with a customer population that has a greater proportion of high-scoring customers. By looking at median values of loyalty metrics for the set of customers of a particular dealer, a company can gauge the quality of those customers.

In addition to scoring its dealers (and using those scores for dealer recognition and rewards), a company can use its loyalty analysis to support its dealers' sales efforts. Dealers should be given access to their own customers' scores so they can recognize which of their customers are accelerating purchases and which are slipping away. This data enables the dealers to improve the service to their customers.

**6. FIND WHICH PRODUCTS AND SERVICES DRIVE SALES OF OTHER PRODUCTS AND SERVICES.**

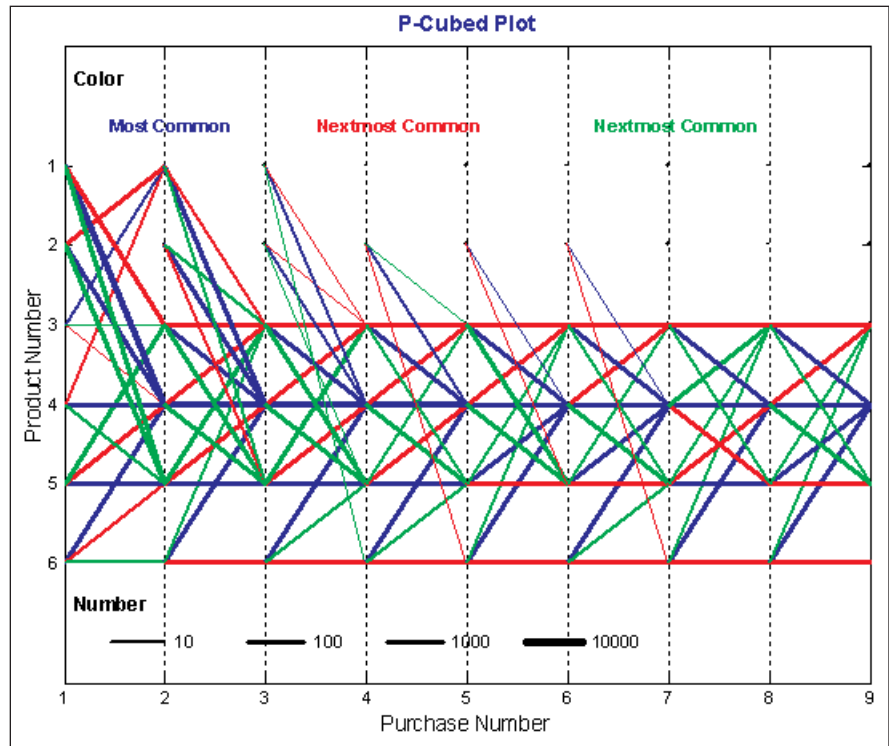
**TABLE 2  
DEALER LOYALTY MEASURES**

FIELD NAME	FIELD DESCRIPTION
<b>EndDate</b>	End date of the analysis interval
<b>VARAcctNum</b>	VAR account number
<b>NumCust</b>	Number of customers
<b>TotRev</b>	Total revenue contributed by customers of this VAR
<b>IntRev</b>	Revenue generated in the last analysis interval
<b>PctChangeTotRev</b>	Percent change in total revenue compared to previous period
<b>LRank25</b>	LRank for the 25th percentile of this VAR's customers
<b>LRank50</b>	LRank for the 50th percentile of this VAR's customers
<b>LRank75</b>	LRank for the 75th percentile of this VAR's customers
<b>AmtScore50</b>	Median AmtScore for this VAR's customers
<b>PurDelC50</b>	Median customer-based purchase delay for this VAR's customers
<b>PurDelH50</b>	Median historical purchase delay for this VAR's customers

Loyalty Builders has developed methods to track the pattern of a customer's succeeding purchases as they progress through a company's product offerings. The graphic representation of this methodology is called a Product Purchase Pattern plot (P-cubed plot). Loyalty Builders analyzes the sequence of customer purchases — which product is, typically, bought first, which second, and so on. All these purchase sequences are then combined to produce the Purchase Path Plot. The thickness of each line represents the number of customers making each particular purchase. Each customer represented in a line can be individually identified.

Two types of information come from this analysis. First, a company can discover which products a customer might buy next. Different plots are made for each LGroup. For a customer in, say, LGroup5 whose fourth purchase was product B, the company learns which product is that customer's most likely fifth purchase, which product is the second most likely fifth purchase, and which is the third most likely fifth purchase, with specified probabilities for each choice. Further, the analysis shows the average time interval between those particular fourth to fifth purchases.

The second type of information is more general — which particular products drive purchases of other products for the customer population as a whole. The macro pattern of purchases is usually evident from looking at the most likely next purchase lines.



## 7. PREDICT FUTURE REVENUES MORE ACCURATELY.

Besides measuring the probability of future purchases of a customer, a loyalty analysis can be the basis for forecasting company revenues. Customer growth is measured, as are contributions from both new and existing accounts. When this data is combined with probability of future purchase, and summed over the entire customer population, a loyalty analysis can predict future revenue from both new and existing accounts for one or two purchasing cycles into the future.

External events such as wars or large stock-market fluctuations can disrupt these predictions, but in a 'business as usual' environment, the loyalty analysis data may be the best predictive tool a company has. It is

especially valuable when forecasting revenues for mature product lines moving towards the end of their life cycle and for newer products in a rapid growth phase.

## 8. GET A CLEARER PICTURE OF THE HEALTH OF YOUR CUSTOMER POPULATION.

A good loyalty analysis gets down to the account level with information about each individual customer and also gives you a '50,000-foot' view of all the customers of your business or all those in a particular product line or market area. Median values for the loyalty metrics are good scorecard indicators. Customer behavior maps, with a dot for each customer, reveal problem spots in the population as a whole. Changes in the summary numbers from one

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analysis to the next tell you whether the population is moving up on the loyalty scale or deteriorating. Businesses need both the account level and overall views.

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## **9. MANAGE CUSTOMER RELATIONSHIPS TO BUILD LOYALTY.**

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Ultimately, customer loyalty is about the relationship between a customer and the company. This relationship always needs to be managed. Building a 'retention culture' is important. Customer-facing employees should have pertinent data about the customer with whom they are interacting. Whether it is a sales person deciding whether or not to offer a discount or a customer-service representative solving a customer problem, know-

ing the value of the customer should be a part of the decision-making process. All of the loyalty metrics are relevant input to these decisions.

Quality relationship management is proactive, and absolutely requires loyalty analysis. Most customers believe they're good customers. Loyalty analysis shows that good customers come in different shapes and sizes, with different purchase behaviors. Identifying these good customers through a loyalty analysis and then contacting them in an appropriate way is very important. Making a relationship call to high-value customers whose Purchase Delay is growing can rescue that customer before a competitor steps in. Giving extra support to customers with very low Purchase Delays and accelerating purchases is

usually appreciated. Analysis can find customers who buy a lot, but only purchase a few different kinds of products. Broadening the range of products they purchase will typically deepen their commitment to the company and build customer loyalty. ■

*To find out more about what Loyalty Builders LLC can do for your business, go to [loyaltybuilders.com](http://loyaltybuilders.com), or e-mail:*

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